TITLE 312 NATURAL RESOURCES COMMISSION

Proposed Rule
LSA Document #16-

DIGEST

Adds 312 IAC 29 to govern oil and gas well activities that are controlled by IC 14-37. Repeals 312 IAC 16. Effective 30 days after filing with the publisher.

312 IAC 16; 312 IAC 29

SECTION 1: 312 IAC 29 IS ADDED TO READ AS FOLLOWS:

ARTICLE 29. OIL AND GAS

Rule 1. Application and administration

312 IAC 29-1-1 Application of article
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. This article assists with the implementation of IC 14-37.

312 IAC 29-1-2 Administration
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) The department's division of oil and gas administers IC 14-37 and this article.

(b) Unless otherwise specified, the division director or a designee of the division director shall take any action that is appropriate for the implementation of IC 14-37 and this article.

Rule 2. Definitions

312 IAC 29-2-1 Applicability
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. The definitions in IC 14-8-2 and this rule apply throughout this article.

312 IAC 29-2-2 "Abandon" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. "Abandon" means to:
(1) terminate operations of a well for oil and gas purposes; and
(2) to reclaim and restore the site of the well in a manner that will protect the waters and lands of the state against pollution.

312 IAC 29-2-3 "Acid well stimulation treatment" defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 3. "Acid well stimulation treatment" means a well stimulation treatment that uses, in whole or in part, the application of one or more acids to the well or underground geologic formation. The acid well stimulation treatment may be at any applied pressure and may be used in combination with hydraulic fracturing treatments or other well stimulation treatments.

312 IAC 29-2-4 "Additive" or "Additive product" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. "Additive" or "additive product" means any substance or combination of substances having a specified purpose that is combined with a base fluid (typically water) to create a fluid that is pumped into a formation during hydraulic fracturing operations or acid well stimulation treatments. A nonexclusive list of common additives are acids, biocides, breakers, buffers, corrosion inhibitors, crosslinkers, demulsifiers, fluid loss additives, friction reducers, gels, iron control agents, oxygen scavengers, pH adjusting agents, proppants (typically sand), scale inhibitors, stabilizers, and surfactants.

312 IAC 29-2-5 "Administrator" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. "Administrator" means:
(1) the administrator of the United States Environmental Protection Agency; or
(2) an authorized representative.

312 IAC 29-2-6 "Annulus" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. "Annulus" means the space between:
(1) the well bore wall and a string of casing;
(2) two (2) strings of casing; or
(3) tubing and the innermost casing.

312 IAC 29-2-7 "Aquifer" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. "Aquifer" means an underground geological formation containing or conducting groundwater. Aquifers are sources of groundwater for wells and springs.

312 IAC 29-2-8 "Area of review" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. "Area of review" means that area within one-quarter (¼) mile of an existing or a proposed Class II well, underground gas storage facility or underground petroleum storage facility that is reviewed during the permitting process and periodically throughout the life of the permitted well or storage facility to evaluate if fluid flow between different formations might occur as a result of operating the permitted well or storage facility.

312 IAC 29-2-9 "Background radiation" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 9. "Background radiation" means radiation at the ground surface from:
(1) cosmic sources;
(2) non-technologically enhanced naturally occurring radioactive material, including radon, except as a decay product of source or special nuclear material; or
(3) global fallout as it exists in the environment from the testing of nuclear explosive devises.
The term does not include sources of radiation from NORM contaminated equipment regulated under this article.

312 IAC 29-2-10 "Base fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. "Base fluid" means a fluid into which additives are mixed to form the hydraulic fracturing fluid that transports proppants into a geologic formation.

312 IAC 29-2-11 "Blind ram" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 11. "Blind ram" refers to a thick, heavy steel component of certain blowout preventers that, when activated, closes and mates with another horizontally opposed ram to close over a well that does not contain drill string or other pipe.

312 IAC 29-2-12 "Blowout" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 12. "Blowout" means the uncontrolled escape of water, oil, gas, or coal bed methane, or a mixture of these from any formation.

312 IAC 29-2-13 "Blowout preventer" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 13. "Blowout preventer" means a heavy casing head control device fitted with special gates or rams which can be closed in an emergency to protect against a blowout. The gates or rams may be of different designs depending upon the type of protection needed and whether drill pipe or other pipe is in the well.

312 IAC 29-2-14 "Blowout preventer stack" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 14. "Blowout preventer stack" means the assembly of well control equipment including blowout preventers, spools, valves, and nipples connected to the top of the casing head to protect against a blowout.

312 IAC 29-2-15 "Bottom plug" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 15. "Bottom plug" means a plug or series of plugs placed in the deeper sections of a well in order to confine hydrocarbons or other formation fluids in their original strata and prevent the migration of fluids between formations through an annulus or within a string of casing.

312 IAC 29-2-16 "Bridge" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 16. "Bridge" means natural or manmade material placed above the bottom of a bore hole.

312 IAC 29-2-17 "Bullhead pumping" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 17. "Bullhead pumping" means placement of cement used in plugging a well by pumping cement under pressure down the casing through a connection at the top of the casing or the well head.

312 IAC 29-2-18 "Cased well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 18. "Cased well" means a well in which production casing has been set and cemented.

312 IAC 29-2-19 "Cement" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 19. "Cement" means ground clinker generally consisting of hydraulic calcium silicates and aluminates and usually containing one (1) or more forms of calcium sulfate as an interground additive. The term may also be referred to as "Portland cement".

312 IAC 29-2-20 "Cement bond-variability density log" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 20. "Cement bond-variable density log" means a written record produced by an acoustic tool that contains, at a minimum, sonic transit time curve, an amplitude curve and a variable density display.

312 IAC 29-2-21 "Circulated cement" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 21. "Circulated cement" when used in reference to the setting of a string of casing means the use of sufficient cement to completely fill the annulus behind the casing and to flow the cement to the surface.

312 IAC 29-2-22 "Circulation method" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 22. "Circulation method" means the circulation of cement by positive pressure displacement through tubing set at a specified depth for plugging a well.

312 IAC 29-2-23 "Circulation pit" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 23. "Circulation pit" means a pit in the ground or a series of open, above-ground tanks usually constructed of steel used during drilling where drilling fluids are mixed and circulated during drilling operations. A circulation pit may also be referred to as a mud pit.

312 IAC 29-2-24 "Class II well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 24. "Class II well" means a well that injects fluids:
(1) Which are brought to the surface in connection with underground natural gas storage operations, underground petroleum storage operations, conventional oil, coal bed methane, or natural gas production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;
(2) For enhanced recovery of oil, coal bed methane, or natural gas; or
(3) For storage of hydrocarbons that are liquid at standard temperature and pressure.

312 IAC 29-2-25 "Coal bed methane" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 25. "Coal bed methane" means gaseous substances of whatever character lying within or emanating from:
(1) unmined coal seams, either naturally or as a result of stimulation of the coal seam;
(2) the void created by mining out coal seams; or
(3) the gob created by longwall or other extraction methods of coal mining.

312 IAC 29-2-26 "Coal lessee" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 26. "Coal lessee" means a person, other than a coal owner, with a present right to extract coal, including a person having the right by virtue of a lease, sublease, license, mining agreement, grant of a term of years, or similar interest.

312 IAC 29-2-27 "Coal owner" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 27. "Coal owner" means a person vested with a whole or undivided fee simple interest or another freehold interest in the coal estate. The term does not include a person with a leasehold or another lesser estate.

312 IAC 29-2-28 "Commercially minable coal resource" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 28. "Commercially minable coal resource" means
(a) a seam of coal that:
(1) can be mined using generally accepted underground practices and suitable equipment; and
(2) consists of coal in sufficient quantities and of sufficient quality to be commercially saleable.

(b) The term includes a seam of coal to which one (1) or more of the following apply:
(1) The seam is:
(A) associated with an underground mine permitted under IC 14-34; and
(B) specifically intended to be mined under the permit.
(2) The seam is associated with an inactive underground mining operation at which mining operations:
(A) have temporarily ceased; and
(B) are anticipated to be resumed by the person with the right to develop the seam.
(3) The seam is identified as a commercially minable coal resource by the owner or lessee of the seam by a map accompanied by an affidavit that:
(A) is filed with the division of oil and gas; and
(B) states that the coal in the seam is being held for later commercial production.
(4) The seam is:

(A) at least thirty-six (36) inches thick; and
(B) located not more than eight hundred (800) feet below the surface.

312 IAC 29-2-29 "Common ownership or control" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 29. "Common ownership or control" means those lands inside the boundaries of a common area within which the proceeds from the production of oil, gas, or coal bed methane are shared among all owners, including royalty and other interest owners, at an established allocation determined according to the terms of a lease, deed, unitization agreement, or similar instrument, including any integration order under IC 13-47-9-1(a) and integration orders by the department under IC 13-47-9-1(b) and IC 13-47-9-2. Production from any well within the common area is shared among the various interest owners regardless of the owner of the property on which the well is actually located.

312 IAC 29-2-30 "Completed zone" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 30. "Completed zone" means a geologic formation in which production, injection, gas storage, gas storage observation, or water supply was established.

312 IAC 29-2-31 "Completion" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 31. "Completion" means work performed on a well for oil and gas purposes following the conclusion of drilling or re-drilling operations wherein the well is equipped or prepared for production or use consistent with its intended purpose. The term includes, but is not necessarily limited to, the following:
(1) the installation of downhole tubulars and equipment;
(2) the use of well stimulation or other treatment operations to enhance the productivity or utility of the well; or
(3) the installation of hardware used to monitor production or to optimize the production from a well.

312 IAC 29-2-32 "Completion fluid waste" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 32. "Completion fluid waste" means any fluid or substance of any kind that flows back to the surface, or is circulated or otherwise removed from a well during well completion operations.

312 IAC 29-2-33 "Completion pit" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 33. "Completion pit" means a lined pit used for storage of completion fluid waste including flow-back fluid, frac flow-back fluids, and drilling fluids or other materials which have been cleaned out of the well bore during the initial completion or stimulation of a well. Reserve pits may be used as a completion pit when drilling operations conclude.

312 IAC 29-2-34 "Concrete production fluid storage structure" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 34. "Concrete production fluid storage structure" means a formed concrete impoundment, the base of which is at or below ground level, which is or has been used for the temporary storage of liquid oilfield waste or produced water prior to disposal.

312 IAC 29-2-35 Confining zone" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 35. "Confining zone" means a stratum or group of strata that prevent the vertical migration of fluid above the injection zone.

312 IAC 29-2-36 "Controls or has controlled a well for oil and gas purposes" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 36. "Controls or has controlled wells for oil and gas purposes" means one (1) or more of the following:
(1) An operator of a well for oil and gas purposes.
(2) An owner of a well for oil and gas purposes.
(3) An officer, director, partner or other authorized representative of an entity owning or operating a well for oil and gas purposes.

312 IAC 29-2-37 "Cushion gas" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 37. "Cushion gas" means, for purposes of underground gas storage, the volume of gas required as permanent storage inventory to maintain adequate reservoir pressure for meeting minimum gas deliverability demands throughout the withdrawal season. Cushion gas may also be referred to as "base gas".

312 IAC 29-2-38 "Cuttings" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 38. "Cuttings" means fragments of rock resulting from the cutting action of the drill bit on rock strata encountered in the well that are transported to the surface.

312 IAC 29-2-39 "Directional well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 39. "Directional well" means a well purposely deviated from the vertical, to intersect the planned zone of production in the target formation at a projected location different than the surface location of the well specified in the permit. A directional well is not a horizontal well.

312 IAC 29-2-40 "Discharge" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 40. "Discharge" means the release, overflow, leakage or seepage of any fluids covered by this Article.

312 IAC 29-2-41 "Disposal well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 41. "Disposal well" means a Class II well used to inject fluids brought to the surface in connection with conventional oil or natural gas production and may be commingled with wastewaters from gas plants that are an integral part of production operations unless those waters are classified as hazardous waste at the time of injection.

312 IAC 29-2-42 "Diverter" defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 42. "Diverter" means a device attached to the wellhead to close any vertical flow of fluids above the device and direct the flow into a line away from the rig floor and into a drilling pit or workover pit. Diverters differ from blowout preventers in that flow is not stopped but is redirected.

312 IAC 29-2-43 "Division" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 43. "Division" refers to the division of oil and gas established under IC 14-9-4-1(15).

312 IAC 29-2-44 "Division director" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 44. "Division director" refers to the director of the division of oil and gas.

312 IAC 29-2-45 "Division of reclamation" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 45. "Division of reclamation" refers to the division of reclamation established under IC 14-9-4-1(18).

312 IAC 29-2-46 "Division of water" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 46. "Division of water" refers to the division of water established under IC 14-9-4-1(22)

312 IAC 29-2-47 "Drilling fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 47. "Drilling fluid" means any of a number of liquid and gaseous fluids and mixtures of fluids and solids as solid suspensions, mixtures and emulsions of liquids, gases, and other solids utilized during oil or gas drilling operations. Drilling fluid typically contains bentonitic clays, chemical additives, foaming agents, lubricants, emulsifiers and weighting materials. Drilling fluid may also be referred to as drilling mud.

312 IAC 29-2-48 "Drilling pit" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 48. "Drilling pit" means an excavated pit or aboveground vessel used during the drilling of a well for storing drilling fluids, drill cuttings, and other fluids or solids used or encountered during drilling operations. Circulation pits and reserve pits are examples of drilling pits

312 IAC 29-2-49 "Drilling unit" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 49. "Drilling unit" means the acreage allotted to a production well taking into consideration the maximum acreage that can be efficiently and economically drained by a single well from a specified formation. Owners of oil and gas interests in the allotted acreage are entitled to share in the production from the well. Unless specifically authorized by this article or IC 14-37. Not more than one (1) well for the production of oil, gas, or coal bed methane may be drilled within a drilling unit.

312 IAC 29-2-50 "Dry hole" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 50. "Dry hole" means an uncased exploratory or development well for oil and gas purposes that the owner or operator determines is:

(1) incapable of producing oil, gas, or coal bed methane in sufficient quantities to justify completion of the well as a production well; or

(2) otherwise unsuitable for its intended use.

312 IAC 29-2-51 "Dump bailer method" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 51. "Dump bailer method" means placement of cement used in plugging a well by using a dump bailer on a wire line.

312 IAC 29-2-52 "Enhanced recovery well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 52. "Enhanced recovery well" means a Class II well that is used to inject fluid under pressure into a geological formation for the enhancement of oil or gas production.

312 IAC 29-2-53 "Enhanced recovery unit" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 53. "Enhanced recovery unit" means a lease, or an area comprised of a group of leases, operating under an agreement that provides for the sharing of production by all of the owners within the unit, which has one (1) or more enhanced recovery wells permitted and in operation within the project.

312 IAC 29-2-54 "Exempted aquifer" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 54. "Exempted aquifer" means an aquifer or a portion of an aquifer that is an underground source of drinking water, but has been exempted under 312 IAC 29-15-2.

312 IAC 29-2-55 "Existing injection well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 55. "Existing injection well" means a Class II well in operation as an injection well before January 1, 1990.

312 IAC 29-2-56 "Flowline" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 56. "Flowline" means a pipe used for transporting crude oil, coal bed methane, natural gas, petroleum products, produced water, or any combination of these in connection with the operation of a well for oil and gas purposes. The term includes all lines within the boundaries of a lease or production unit which transport produced fluids from a well for oil and gas purposes to a central tank battery, gas processing facility, or other point of initial processing or treatment prior to custody transfer. The term also includes all lines within the boundaries of a lease or production unit which transport fluids to a Class II well or underground storage well from:

(1) a central tank battery, in the case of Class II fluids; or

(2) that point where an underground storage operator assumes control of the storage gas or product.

312 IAC 29-2-57 "Fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 57. "Fluid" means a liquid or gaseous material or substance that flows or moves.

312 IAC 29-2-58 "Formation" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 58. "Formation" means a body of consolidated rock or unconsolidated earth material characterized by a degree of lithographic homogeneity that is mappable on the earth's surface or traceable in the subsurface.

312 IAC 29-2-59 "Frac flow-back fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 59. "Frac flow-back fluid" means fluids that consist of water and additives that flow from a well following hydraulic fracturing of a well.

312 IAC 29-2-60 "Fresh water" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 60. "Fresh water," for purposes of identifying an underground source of drinking water, means water that contains no more than ten thousand (10,000) milligrams per liter of total dissolved solids.

312 IAC 29-2-61 "Gas" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 61. "Gas" means natural gas unless otherwise specified.

312 IAC 29-2-62 "Gas well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 62. "Gas well" means any well that:
(1) produces natural gas not associated with oil; or
(2) produces more than ten thousand (10,000) cubic feet of natural gas to each barrel of oil produced from the same producing formation.

312 IAC 29-2-63 "Gas storage observation well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 63. "Gas storage observation well" means a well used in conjunction with an underground gas storage reservoir which has been completed or recompleted for the purpose of observing and measuring subsurface phenomena, including the presence of hydrocarbon gas, pressure fluctuations, fluid levels and flow, and temperature by physical, electrical, or geophysical methods.

312 IAC 29-2-64 "Gas storage well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 64. "Gas storage well" means a well used for the injection of gas into or the withdrawal of gas from an underground gas storage reservoir.

312 IAC 29-2-65 "General oilfield waste" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 65. "General oilfield waste" means oily rags, used sorbent materials, chemical containers including any unused chemicals, oil filter and gaskets, used motor oil, lubricating oils, hydraulic fluids, diesel fuels, paint and solvent wastes and other similar wastes generated during drilling, completion, production, workover and plugging activities, and which are not exempt from the provisions of Subtitle C of the Federal Resource Conservation Recovery Act of 1976 (RCRA).

312 IAC 29-2-66 "Geological or structure test well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 66. "Geological or structure test well" means a nonproduction well drilled to investigate geologic, structural, or hydrogeologic stratigraphic intervals.

312 IAC 29-2-67 "Ground water" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 67. "Ground water" means all water occurring beneath the surface of the ground regardless of location.

312 IAC 29-2-68 "Horizontal drain hole" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 68. "Horizontal drain hole" means the portion of a wellbore with seventy (70) degrees to one hundred ten (110) degrees deviation from vertical drilled at least one hundred (100) feet into the producing interval beginning at the point where the wellbore penetrates the producing interval and ending at the farthest point drilled within the producing interval.

312 IAC 29-2-69 "Horizontal well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 69. "Horizontal well" means any well that is developed with at least one (1) horizontal drain hole.

312 IAC 29-2-70 "Hydraulic fracturing" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 70. "Hydraulic fracturing" means the process of pumping fluid into a closed wellbore with sufficient downhole pressure to crack or fracture the formation, allowing the injection of a proppant into the fractures, thereby creating a high-permeability plane through which fluids can flow.

312 IAC 29-2-71 "Hydraulic fracturing fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 71. "Hydraulic fracturing fluid" means one or more base fluids mixed with physical and chemical additives for the purpose of hydraulic fracturing.

312 IAC 29-2-72 "Indiana department of environmental management" or "IDEM" defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 72. "Indiana department of environmental management" or "IDEM" means the agency established under IC 13-13-1.

312 IAC 29-2-73 "Indiana geological survey" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 73. "Indiana geological survey" refers to the Indiana geological survey established by IC 21-47-2-2.

312 IAC 29-2-74 "Injection well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 74. "Injection well" means a well into which fluids are injected.

312 IAC 29-2-75 "Injection zone" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 75. "Injection zone" means a geological formation, group of formations, or part of a formation receiving fluids through a well.

312 IAC 29-2-76 "Inspector" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 76. "Inspector" means an oil and gas inspector of the department.

312 IAC 29-2-77 "Karst" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 77. "Karst" means terrain, generally underlain by limestone or dolomite, in which the topography is chiefly formed by the dissolving of rock and which may be characterized by sinkholes, sinking streams, closed depressions, subterranean drainage, and caves.

312 IAC 29-2-78"Karst prone areas" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 78. "Karst prone areas" means areas where karst is likely to be encountered when drilling wells for oil and gas purposes. Karst prone areas will be identified by the division after consultation with the Indiana geological survey and the location of these areas made available on the division website.

312 IAC 29-2-79 "Kick-off point" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 79. "Kick-off point" means the point in the vertical section of a well where the wellbore is intentionally deviated from vertical in order to complete a directional or horizontal well.

312 IAC 29-2-80 "Lease" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 80. "Lease" means the property from which an owner or operator may produce oil or gas.

312 IAC 29-2-81 "Log" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 81. "Log" means a systematic, written or digital record that describes or depicts the properties of the strata and formations progressively encountered in a wellbore. The term includes data recorded, which may depict, but is not necessarily limited to:

(1) electrical properties (resistivity and conductivity at various frequencies);
(2) sonic properties;
(3) active and passive nuclear measurements;
(4) dimensional measurements of the wellbore;
(5) cementation of the wellbore;
(6) the results of formation fluid sampling;
(7) formation pressure measurement, wireline-conveyed sidewall coring tools; and
(8) other wellbore or formation characteristics.

312 IAC 29-2-82 "Lost-circulation zone" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 82. "Lost-circulation zone" means any zone which prevents or reduces the circulation of drilling fluid or a cement slurry back to the surface after being pumped into a well as a result of fluid loss into natural fissures, fractures, or strata of high permeability.

312 IAC 29-2-83 "Material safety data sheet" or" MSDS" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 83 "Material safety data sheet" or "MSDS" is a form with data regarding the properties of a particular substance which meets the requirements of the United States Occupational Safety and Health Administration Hazard Communication Standard under 29 CFR 1900.1200. The forms may also be referred to as "safety data sheets" or "SDS".

312 IAC 29-2-84 "Microroentgens per hour (µR/hr) " defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 84. "Microroentgens per hour (µR/hr)" means a measurement of exposure from x-ray and gamma ray radiation in air.

312 IAC 29-2-85 "Mud-laden fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 85. "Mud-laden fluid" means a mixture that is predominantly water and clay, but may contain fabricated additives.

312 IAC 29-2-86 "Natural gas" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 86. "Natural gas" means hydrocarbons that, when produced in a natural state from an underground reservoir, maintains a gaseous state at atmospheric conditions.

312 IAC 29-2-87 "Noncommercial well" defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 87. "Noncommercial well" means a well permitted under IC 14-37 and this article for which the owner or operator has demonstrated that the coal bed methane or natural gas produced does not enter commerce or undergo a transfer of ownership; and

(1) is consumed on the property on which the well is located for any of the following purposes:

(A) heating a residential structure;

(B) heating a barn or similar agricultural structure;

(C) drying grain or similar agricultural purpose;

(D) a heat source for a retail or commercial business; or

(2) is consumed on property adjacent to the property on which the well is located for residential or agricultural building heating purposes or other purposes at the sole discretion of the owner of the property upon which the well is located.

312 IAC 29-2-88 "NORM" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 88. "NORM" means naturally occurring radioactive material.

312 IAC 29-2-89 "NORM-contaminated equipment" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 89. "NORM-contaminated equipment" means equipment used in oil or gas production operations or Class II disposal operations where the equipment:

(1) is or has been in contact with oil and gas waste or produced fluids; and

(2) exhibits a minimum radiation exposure level greater than 25-μR/hr above background radiation levels at any accessible point on the equipment.

312 IAC 29-2-90 "Oil and gas NORM waste" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 90. "Oil and gas NORM waste" means any solid, liquid, or gaseous material or combination of materials, except NORM-contaminated equipment, that:

(1) in its natural physical state spontaneously emits radiation;

(2) is discarded or unwanted;

(3) constitutes, is contained in, or has contaminated oil and gas waste; and

(4) prior to treatment or processing emits radiation at or in excess of:

(A) 5 pCi/g Ra-226 or Ra-228; or

(B) 150 pCi/g of any other NORM radionuclide.

312 IAC 29-2-91 "Oil and gas waste materials" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 91. "Oil and gas waste materials" means any solid or liquid material, or combination of these materials, generated, used, or produced in connection with the exploration, production, or operation of wells for oil and gas purposes that is discarded, abandoned, or recycled.

312 IAC 29-2-92 "Oil" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 92. "Oil" means all liquid petroleum produced at a well.

312 IAC 29-2-93 "Oil-based drilling fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 93. "Oil-based drilling fluid" means any oil based drilling fluid containing greater than five percent (5%) by volume crude oil, diesel oil or other refined oil product.

312 IAC 29-2-94 "Oil well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 94. "Oil well" means any well which produces one (1) barrel or more of oil to each ten thousand (10,000) cubic feet of natural gas.

312 IAC 29-2-95 "Operator" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 95. "Operator" refers to a person:
(1) issued a permit under this article; or
(2) engaging in an activity for which a permit is required under this article.

312 IAC 29-2-96 "Owner" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 96. "Owner" means a person who has the right to drill into and produce from a pool and to appropriate the oil and gas produced from the pool for:
(1) the person or others; or
(2) the person and others.

312 IAC 29-2-97 "Packer" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 97. "Packer" means an expanding mechanical device used in a well to seal off certain sections of the well when cementing, testing, or isolating the well from the completed interval.

312 IAC 29-2-98 "Pattern of violations" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 98. "Pattern of violations" means two (2) or more violations by an applicant, or an officer, a partner, or a director of the applicant, of the same or related requirements of IC 14-37 or this article, determined by the division based on two (2) or more inspections of wells owned or controlled by the applicant, an officer, a partner, or a director of the applicant conducted within any twelve (12) month period

312 IAC 29-2-99 "Person" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 99. "Person" means an individual, a partnership, an association, a fiduciary, an executor or administrator, a limited liability company, a corporation, or a governmental entity.

312 IAC 29-2-100 "Person owning or controlling an applicant" defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 100. "Person owning or controlling an applicant" means one (1) or more of the following:
(1) An individual who is the applicant.
(2) Based on instruments of ownership or voting securities, owning of record in excess of fifty percent (50%) of an applicant.
(3) An officer or director of the applicant.
(4) A general partner in a partnership.

312 IAC 29-2-101 "Petroleum storage well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 101. "Petroleum storage well" means a well that is used for the injection of:
(1) petroleum, other than crude oil, coalbed methane, or natural gas; or,
(2) any hydrocarbon that is a gas under standard temperature and pressure;
into an underground geologic formation or structure or the subsequent withdrawal there from. The term does not include a well that is used for the injection or withdrawal of any hydrocarbon that is a liquid at standard temperature and pressure. For purposes of this article, the term includes propane and butane or mixtures thereof, also commonly referred to as liquid petroleum gas.

312 IAC 29-2-102 "Picocuries per gram (pCi/g)" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 102. "Picocuries per gram" or "pCi/g" means a measure of the radioactivity in one gram of a material. One picocurie is that quantity of radionuclide(s) that decays at the rate of 3.7×10^{-2} disintegrations per second.

312 IAC 29-2-103 "Plug" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 103. "Plug", when used as a verb, means to stop the flow of water, oil, or gas into or from any formation through a bore hole or a well penetrating that formation. "Plug" when used as a noun, refers to a material, usually cement, or a device such as a bridge plug, that is placed in the well bore or inside casing to provide hydraulic isolation and prevent the flow of water, oil, or gas.

312 IAC 29-2-104 "Plugging pit" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 104. "Plugging pit" means an excavated lined pit or aboveground vessel used during the plugging of a well for storing or containing well fluids, cement, and any other fluids or solids used or encountered during the plugging of a well.

312 IAC 29-2-105 "Pollution" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 105. "Pollution" means an artificial or artificially induced alteration of the chemical, physical, biological or radiological properties of the water.

312 IAC 29-2-106 "Pool" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 106. “Pool” means an accumulation of oil or natural gas that occurs in a separate underground reservoir under a single pressure system.

312 IAC 29-2-107 “Pooled production unit” defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 107. “Pooled production unit” means an area comprised of a group of leases operating under an agreement that provides for the sharing of production by all of the owners within the unit.

312 IAC 29-2-108 “Produced water” defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 108. “Produced water” means water produced from any productive or potentially productive oil or gas producing interval in a well, which is not completion flow-back fluid, frac flow-back fluid, workover flow-back fluid or encountered water.

312 IAC 29-2-109 “Production fluid storage pit” defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 109. “Production fluid storage pit” means any impoundment, other than a concrete production fluid storage structure that is or has been used for the temporary storage or separation of produced fluids.

312 IAC 29-2-110 “Proppant” defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 110. "Proppant" means sized particles, typically sand, mixed with hydraulic fracturing fluid to hold fractures open after a hydraulic fracturing treatment.

312 IAC 29-2-111 “Radiation survey instrument” defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 111. “Radiation survey instrument” means a piece of equipment used to detect and measure radiation exposure levels from 1 µR/hr through at least 500 µR/hr .

312 IAC 29-2-112 “Recomplete” or “recompletion” defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 112. “Recomplete” or “recompletion” means completion for production of an existing well bore in another interval from that in which the well was previously completed.

312 IAC 29-2-113 “Reserve pit” defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 113. “Reserve pit” means a drilling pit not part of the active circulation system, used to store drilling fluids or to contain fluids generated during drilling operations. Such fluids would include, but not be limited to, drill cuttings, drilling fluids, encountered water, rig wash water, and spills or leaks from drilling equipment.

312 IAC 29-2-114 “Reservoir” defined
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 114. "Reservoir" means an underground geological formation that contains oil or natural gas.

312 IAC 29-2-115 "Saltwater" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 115. "Saltwater" means water that is brought to the surface in connection with conventional oil or gas production or wastewater (other than wastewaters classified as hazardous waste) from gas plants that are an integral part of production operations. The term includes fluids contaminated with saltwater.

312 IAC 29-2-116 "Saltwater drilling fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 116. "Saltwater drilling fluid" means drilling fluid with a total chlorides content of ten thousand parts per million (10,000 ppm) or greater.

312 IAC 29-2-117 "Secondary containment structure" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 117. "Secondary containment structure" means a structure specifically constructed to contain a spill of crude oil or saltwater for a period of no less than seventy-two (72) hours.

312 IAC 29-2-118 "ShallowTrenton limestone reservoir region" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 118. "Shallow Trenton limestone reservoir region" means a carbonate reservoir of Ordovician age where the top of the Trenton formation is located:
(1) within one-thousand five hundred feet (1,500') of the surface; and
(2) in the following counties: Adams, Allen, Bartholomew, Blackford, Carroll, Cass, Clark, Clinton, Dearborn, Decatur, Delaware, Fayette, Franklin, Fulton, Grant, Hamilton, Hancock, Henry, Howard, Huntington, Jasper, Jay, Jefferson, Jennings, Kosciusko, Lake, Madison, Marion, Miami, Newton, Pulaski, Randolph, Ripley, Rush, Shelby, Switzerland, Tipton, Union, Wabash, Wayne, Wells, White, and Whitley.

312 IAC 29-2-119 'Spill" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 119. "Spill" means any unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of crude oil or saltwater from any operation governed by IC 14-37.

312 IAC 29-2-120 "Standard temperature and pressure" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 120. "Standard temperature and pressure" means, for purposes of determining the physical characteristics of a gas, an environment where the temperature of the gas is zero degrees Celsius (0^{o} C.) at an absolute pressure of one (1) bar or 14.504 psi.

312 IAC 29-2-121 "Stratum" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 121. "Stratum" means a single sedimentary bed or layer, regardless of thickness, that consists of generally homogeneous rock material.

312 IAC 29-2-122 "Tank battery" and "Tank battery facility" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 122. "Tank battery" and "tank battery facility" means an area where one or more tanks have been placed for the purpose of storing and managing produced fluids received from wells for oil and gas purposes or resulting from the treatment of produced fluids. Included also would be associated fluid processing equipment such as separators and heater treaters. The term does not include a location where temporary or portable tanks are used to store produced fluids produced in connection with well completion, workover, testing, or plugging operations.

312 IAC 29-2-123 "Tank bottoms" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 123. "Tank bottoms" means fluids, consisting primarily of emulsified oil, bottom sediments, and water, from stock tanks that are a part of primary field operations.

312 IAC 29-2-124 "Top plug" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 124. "Top plug" means a plug or series of plugs placed between the deeper of fifty (50) feet below the lowermost commercially minable coal resource, or the lowest underground source of drinking water, and extending to the surface.

312 IAC 29-2-125 "Total dissolved solids" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 125. "Total dissolved solids" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR 136.

312 IAC 29-2-126 "Tubing" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 126. "Tubing" means a string of pipe set within a cased well through which fluid is produced or injected.

312 IAC 29-2-127 "Uncased well" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 127. "Uncased well" means a well in which production casing is either not set or not cemented such as with a dry hole.

312 IAC 29-2-128 "Underground gas storage facility" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 128. "Underground gas storage facility" means, for purposes of underground gas storage, an underground reservoir, the wellbore tubular goods, the wellhead, and related equipment to the last positive shut-off valve before the gathering line that is used or is to be used for the underground storage of gas and all surface and subsurface rights and appurtenances necessary or useful in the operation of the facility for the underground storage of gas, including any necessary or reasonable buffer zone as recommended by the storage operator and approved by the division director for the purpose of insuring the

safe operation of the storage of gas and to protect the storage facility against pollution, invasion, and escape or migration of gas, together with any and all subsequent extensions.

312 IAC 29-2-129 "Underground gas storage reservoir" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 129. "Underground gas storage reservoir" means an underground reservoir, stratum or formation which is completely separated from any other porous zone and is suitable for or capable of being made suitable for the injection and storage of gas and the withdrawal of gas.

312 IAC 29-2-130 "Underground petroleum storage facility" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 130. "Underground petroleum storage facility" means, for purposes of underground petroleum storage, an underground cavern or excavation, the wellbore tubular goods, the wellhead, and related equipment to the last positive shut-off valve before the gathering line that is used or is to be used for the underground storage of petroleum and all surface and subsurface rights and appurtenances necessary or useful in the operation of the facility for the underground storage of petroleum, including any necessary or reasonable buffer zone as recommended by the storage operator and approved by the division director for the purpose of insuring the safe operation of the storage of petroleum and to protect the storage facility against pollution, invasion, and escape or migration of petroleum, together with any and all subsequent extensions.

312 IAC 29-2-131 "Underground source of drinking water" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 131. "Underground source of drinking water" means an aquifer or a portion of an aquifer, other than an exempted aquifer, that:
(1) presently supplies fresh water to any user; or
(2) contains a sufficient quantity of fresh water to supply a future user.

312 IAC 29-2-132 "Waste" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 132. "Waste" includes the following:
(1) Locating, spacing, drilling, equipping, operating, or producing a well for oil and gas purposes drilled after March 13, 1947, in any manner that:
(A) reduces or tends to reduce the quantity of oil or gas ultimately to be recovered from any well in this state; or
(B) violates the spacing provisions adopted by the commission under IC 14-37 and this article.
(2) Storing oil in earthen reservoirs except in an emergency to prevent the total loss of that oil.
(3) Producing oil or gas in a manner that will cause water channeling or zoning.
(4) Injecting fluids into a formation interval capable of producing oil or gas, except in accordance with the terms of a permit for a Class II well issued under this Article.
(5) Allowing water, other than fresh water, to flow from any producing horizon located in a producing pool, except in accordance with the terms of a permit issued under this Article.
(6) Allowing gas from a well that produces only gas to escape into the atmosphere, except as is necessary while making or changing connections, completing the well, or reconditioning the well.
(7) Blowouts and other uncontrolled discharges of oil, gas, coal bed methane or any other fluids from a well for oil and gas purposes.

312 IAC 29-2-133 "Water-based drilling fluid" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 133. "Water based drilling fluid" means drilling fluids containing fresh water as the liquid component of the drilling fluid rather than crude oil or refined oil such as diesel.

312 IAC 29-2-134 "Water table" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 134. "Water table" means the surface between the zone of saturation and the zone of aeration and the surface of a body of unconfined ground water at which the pressure is equal to that of the atmosphere.

312 IAC 29-2-135 "Well control equipment" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 135. "Well control equipment" means systems and components that are installed on the wellhead or otherwise used to control pressure within the wellbore and prevent an uncontrolled release of formation gases or liquids. Components include, but are not limited to:

(1) Blowout preventers.
(2) Diverters.
(3) Rotating heads.
(4) Valves.
(5) Chokes.
(6) Spools.
(7) Lines.
(8) Actuators.
(9) Monitoring equipment.

312 IAC 29-2-136 "Well for oil and gas purposes" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 136. "Well for oil and gas purposes" means a well bore drilled, deepened, or converted for any purposes for which a permit is required under IC 14-37 including the following:

(1) An oil well.
(2) A natural gas well.
(3) A coal bed methane well.
(4) A Class II well.
(5) A structure test well.
(6) A well used for the sole purpose of supplying water for the secondary recovery of petroleum resources.
(7) An underground gas storage well or underground gas storage observation well.
(8) An underground petroleum storage well.

312 IAC 29-2-137 "Well stimulation" defined
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 137. "Well stimulation" means a treatment performed to restore or enhance the productivity of a well. Stimulation treatments consist of two (2) main groups:

(1) hydraulic fracturing treatments are performed above the fracture pressure of the reservoir formation to create a highly conductive flow path between the reservoir and the wellbore.
(2) matrix treatments are performed below the reservoir fracture pressure to restore the natural permeability of the reservoir following changes such as mineral precipitate buildup in the near-wellbore area. An acid well stimulation treatment would be considered a matrix treatment.

312 IAC 29-2-138 "Workover" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 138. "Workover" means the process of performing major maintenance or remedial treatments on a well for oil and gas purposes for the purpose of restoring, prolonging or enhancing the productivity of the well. Workovers usually involve the use of a special rig set up over the well that is equipped to perform such operations.

312 IAC 29-2-139 "Workover pit" defined
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 139. "Workover pit" means an excavated lined pit or aboveground vessel used while performing workover operations for storing or containing well fluids, cement, and any other fluids or solids used or encountered during the workover operations.

Rule 3. General provisions

312 IAC 29-3-1 Forms
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. The division shall prescribe and prepare forms required under this article.

312 IAC 29-3-2 Severability of rules
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. If any word, phrase, sentence, or other portion of a rule under this article is declared invalid, that declaration shall not affect the remaining portions and parts of the rule and this article.

312 IAC 29-3-3 Waste prohibited
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) An owner or operator shall not commit waste.

(b) The following are not prohibited as waste:

(1) The pumping or placement of fluids for well stimulation conducted according to IC 14-37 and this article.

(2) The burning of natural gas in flares located a safe distance from the well by an owner or operator of a well producing both oil and natural gas if it is not economical to market the natural gas.

(3) The burning of coal bed methane in flares located a safe distance from a coal bed methane well by the owner or operator of a coal mine, or a designee of the owner or operator of a coal mine, if either or both of the following apply:

(A) The burning is necessary to protect coal miners' safety.

(B) It is not economical to market the coal bed methane.

312 IAC 29-3-4 Informal hearings
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) To assist with the administration of IC 14-37 or this article the division shall conduct an informal hearing to consider any of the following:

(1) A request to amend or repeal a rule in this article.

(2) A request relating to the issuance, reissuance, modification, or revocation of a permit for oil and gas purposes

(3) A request for an exception to a drilling unit or spacing requirement.

(4) A request relating to review of a pending petition for an aquifer exemption under 312 IAC 29-15.

(5) A request for an integration of interests in drilling units under IC 14-37-9 if the owners of separate interests have not agreed to integration.
(6) The issuance of a notice of violation.

(b) Nothing in this section shall prohibit the division from holding or authorizing an informal hearing on its own initiative to consider any matter to assist with the administration of IC 14-37 and this article.

(c) An informal hearing under this article shall be conducted by the division director or an authorized representative of the division director in a manner that will facilitate public participation and the gathering of information relevant to the matter under consideration. An informal hearing is not governed by the rules of evidence or discovery.

(d) The division shall provide notification by first class mail, publication, or both, reasonably calculated to inform affected persons of the time, place, and purpose of the hearing. Notification of an informal hearing to consider a Class II well permit or permit application shall be provided to the same persons identified under 312 IAC 29-5-4.

(e) Within thirty (3) days following the conclusion of an informal hearing, the division director or the authorized representative of the division director shall make written findings and issue an order for disposition of the matter.

(f) A copy of an order resulting from an informal hearing shall:
(1) include instructions for seeking administrative review under IC 4-21.5
(2) sent by first class mail to each person:
(A) notified in addordance with subsection (d);
(B) who participated in the informal hearing; and,
(B) reasonably known to be affected by the order.
(2) published on the division website.

(g) An order resulting from an informal hearing under this article is subject to administrative review under IC 4-21.5 and 312 IAC 3-1, except an order with respect to rule adoption which is subject to review under IC 4-22-2.

312 IAC 29-3-5 Confidentiality of well information
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. Upon written request by the operator the following information shall be held confidential by the division for a period of one (1) year from the date of completion of a well for oil and gas purposes:
(1) The driller's log and completion report, including all completion information accompanying the completion report;
(2) The geophysical or instrumental logs;
(3) Drill cuttings or cores; and
(4) Well production information submitted in accordance with 312 IAC 29-25-1.

Rule 4. Permits and transfer procedures – all wells

312 IAC 29-4-1 Permit required
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) A person may not drill, deepen, operate, or convert a well for oil and gas purposes without a permit issued by the division under IC 14-37 and this article.

(b) No person may commence drilling, construction, operation, or conversion of a Class II well except in conformance with this article.

(c) The original or a copy of the permit must be posted by the operator at the well site before drilling, deepening, or operating a well.

312 IAC 29-4-2 Permit applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) This rule establishes general application requirements for a permit to:
(1) drill;
(2) deepen;
(3) operate; or
(4) convert;
a well for oil and gas purposes.

(b) An application for a permit to:
(1) drill;
(2) deepen;
(3) operate; or
(4) convert;
a well for oil and gas purposes shall be made on a form prescribed by the division

(c) A permit application must be signed by:
(1) the person designated on the application as a person who controls the well for oil and gas purposes; or
(2) an authorized agent of the person.
Upon a request by the division, a representative who signs on behalf of an owner, operator or entity must furnish satisfactory evidence of authority.

(d) An applicant shall remit with the application a permit fee of two hundred fifty dollars ($250) in cash, by check, or by draft, payable to the department. However, a person may apply for an expedited review of the application for a permit except for a Class II or noncommercial well by submitting a permit fee of seven hundred fifty dollars ($750).

(e) An application must be accompanied by a survey certified by a professional surveyor registered under IC 25-21.5 showing the location of the proposed well for oil and gas purposes, giving the:
(1) quarter, quarter, quarter section, township, range, county, and lot number and the footages from the well to the survey lines;
(2) block of the recorded plat if the land is platted;
(3) three (3) nearest boundary lines of the tract;
(4) distance in two (2) directions from a corner of the tract of land upon which the well is to be drilled and from the nearest quarter post or lot corner; and
(5) Universal Transverse Mercator (UTM) coordinates accurate to within four (4) meters of the actual surface location on the ground.

(f) For horizontal and directional wells, in addition to the requirements of subsection (e), the survey certified by a professional surveyor registered under IC 25-21.5 shall include the following:
(1) the surface location and the bottom hole location with the footages from each point to the survey lines; and
(2) the locations where each horizontal drainhole enters and departs the target zone with the footages from each point to the survey lines.

(g) A bond, if required under 312 IAC 29-11-3, must accompany a permit application.

312 IAC 29-4-3 Demonstration of ownership of mineral interest
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) Each application for a permit under IC 14-37 and this article must show the following property information on the survey required under subsection 2(e) of this rule:
(1) the drilling unit boundary for each oil or gas production well;
(2) the boundary of each property or lease on, or contiguous to, the drilling unit for which the applicant claims a right to drill and operate a well for oil and gas purposes;

(3) the boundary of the area incorporated into common ownership and control, if the drilling unit is comprised of separate oil and gas interest owners;
(4) the boundary of the enhanced recovery unit or pooled production unit, if the well is part of an existing enhanced recovery unit or pooled production unit or the well is proposed to be included in a new enhanced recovery unit or pooled production unit; and,
(5) the location of each house, barn, building, or structure (other than fences) located within two hundred (200) feet of the well.

(b) The application shall include a statement that the applicant owns or controls the rights to drill, deepen, operate and produce the well for oil and gas purposes for all properties within the drilling unit for the well.

312 IAC 29-4-4 Surface owner notification of intent to survey
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) An application for a well for oil and gas purposes must include the name and address of the owner of the property on which the well is to be located as reflected in the county tax duplicate records or the last known address of the most recent owner shown in the county transfer book.

(b) An applicant shall provide proof that the owner of the property on which the well is to be located has received notice as required by IC 32-23-7-6.5. Any of the following are acceptable for demonstrating proof of surface owner notification:
(1) A certified mail receipt accompanied by a copy of the written notification to the landowner;
(2) A written statement from the surface owner acknowledging receipt of the notification; or
(3) A copy of a written agreement with the surface owner establishing different notification terms accompanied by written verification that notice was provided in accordance with the agreed upon terms.

312 IAC 29-4-5 Permitting of wells within one-half (½) mile of a gas or petroleum storage reservoir
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. An application for a well for oil and gas purposes proposed to be drilled in or within one-half (½) mile of an underground gas storage facility or underground petroleum storage facility shall not be approved except in accordance with the requirements of 312 IAC 29-17.

312 IAC 29-4-6 Application requirements for a well within incorporated boundary of a city or town
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) A permit application for a well for oil and gas purposes proposed to be drilled within the incorporated boundary of a city or town must be accompanied by a certified copy of the official consent to drill the well by ordinance of the municipal legislative body.

312 IAC 29-4-7 Approval or denial of well permits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) Except as provided in subsection (b), if an applicant for a permit complies with IC 14-37 and this article, the division shall issue a permit.

(b) The division may deny a permit application if the applicant or if a person owning or controlling the applicant:
(1) has been issued a notice of violation and failed to abate the violation within sixty (60) days after the deadline for abatement, unless the person has requested an administrative adjudication of the notice of violation, and a final determination has not been rendered by the commission;
(2) controls or has controlled any well for oil and gas purposes and has demonstrated a pattern of violations of IC 14-37 and this article that have resulted in damage to the environment; or
(3) has had a permit revoked under IC 14-37.

(c) For a permit application that does not meet the requirements of IC 14-37 and this article the division will issue a notice of incomplete application allowing the applicant thirty (30) days to correct the deficiencies. Failure to correct the deficiencies will result in the division's denial of the application.

(d) Notice of the approval or denial of a permit application, that will include instructions for seeking administrative review under IC 4-21.5, shall be provided to the applicant and to each person who filed objections to or participated in an informal hearing relating to the application.

(e) A decision to approve or deny a permit application for a well for oil and gas purposes is subject to administrative review under IC 4-21.5.

(f) The division shall publish a list of permit decisions on its website no less frequently than once per week including instructions for obtaining copies of the well permit application.

312 IAC 29-4-8 Permit modification; amendment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. (a) The division may require modification of a permit for a well for oil and gas purposes for any of the following causes:

(1) The person controlling the well for oil and gas purposes requests or agrees to a modification.

(2) There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance justifying the modification of the original permit.

(3) The department has received information that the cumulative effects on the environment resulting from the permitted well are unacceptable.

(4) IC 14-37 or this article is changed by amendment or by a change in the law that formed the basis for the approval of the permit application.

(5) The division director determines good cause exists for the modification of a compliance schedule as a result of events over which the person controlling the well for oil and gas purposes has little or no control and for which no other remedy is practicable.

(6) Good cause exists for the revocation of a permit under 312 IAC 33, but the division director finds that a modification is appropriate to fulfill the purposes of IC 14-37.

(b) A person controlling the well for oil and gas purposes may, before drilling is commenced, file an amended permit application, with the original permit attached, seeking to change a well location. The division may issue an amended permit if the modified well placement:

(1) would be located on the original lease;

(2) does not affect a person who would have been entitled to notification had the modified location been included in the original permit application, but who was not notified of the original application; and

(3) does not significantly change how a person entitled to notification would be affected.

(c) A decision to modify a permit under this section is subject to IC 4-21.5.

312 IAC 29-4-9 Permit duration
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. (a) A permit to drill a new well for oil and gas purposes expires one (1) year from the date of issuance unless the drilling of the well has commenced.

(b) A permit authorizing the operation of a well for oil and gas purposes is effective for the life of the well so long as the well is operated according to IC 14-37, this article and the terms of the permit unless the permit is revoked, expired, or otherwise terminated under this article.

312 IAC 29-4-10 Permit transfer
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. (a) This section establishes the requirements for the transfer of a permit issued by the division for a well for oil and gas purposes.

(b) A person controlling a well for oil and gas purposes must provide advance notice to the division of the intention to transfer a permit to another person. The application for a permit transfer shall be completed on a form prescribed by the division.

(c) The following must be submitted with an application for a permit transfer:
(1) A bond of the transferee, if required under 312 IAC 29-11-3.
(2) A fee of fifteen dollars ($15) payable to the department for each application for permit transfer. However, if an applicant submits more than fifty (50) applications simultaneously, the transfer fee for each application in excess of fifty (50) is ten dollars ($10).

(d) The department shall grant approval of an application for permit transfer except upon a written finding that sets forth at least one (1) of the following factors with respect to the person who will control the well for oil and gas purposes following the transfer of the permit:
(1) The fee required by this section was not submitted.
(2) A bond of the transferee has not been submitted, if required in 312 IAC 29-11-3.
(3) The transferee is a person controlling a well for oil and gas purposes and the transferee has demonstrated a pattern of willful violations of IC 14-37 or this article that has resulted in substantial damage to the environment indicating an intention not to comply with IC 14-37 or this article.
(4) The transferee is a person controlling a well for oil and gas purposes against which there is a pending notice of violation or civil penalty under 312 IAC 29-33-3. If this finding is made, however, the transferee is not disqualified from receiving the transfer if:
(A) The violation has been or is in the process of being corrected to the satisfaction of the division director; or,
(B) The transferee has filed and is presently pursuing administrative review of the violation under IC 4-21.5.

(e) If an application is filed to transfer a permit on which there is a pending notice of violation, the person controlling the well for oil and gas purposes against which the violation was issued, and its surety, continue to be liable for performing the abatement and for satisfying any resulting penalty. A transferee of a permit is also liable for abatement and for any penalty attributable to the period following transfer of the permit. However, the division director may, in writing, waive any penalty that would otherwise apply during a period of not more than ninety (90) days following transfer of the permit if the division director determines that the transferee is acting in good faith to correct the violation.

(f) No transfer of a permit issued for oil and gas purposes is effective until the transfer is approved in writing by the division director.

(g) A decision to approve or deny and application for permit transfer under this section is subject to IC 4-21.5.

Rule 5. Additional permit requirements for Class II wells

312 IAC 29-5-1 Class II Well Applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) This rule establishes permit requirements for Class II wells in addition to the requirements of 312 IAC 29-4.

(b) In addition to the requirements of 312 IAC 29-4, an application for a permit to convert an existing well or to drill and construct a Class II well must be accompanied by the following:
(1) The well survey required under 312 IAC 29-4-2(e) must also include the permit number, location, and depth of the following:

(A) each well for oil and gas purposes;
(B) any other well, including abandoned and nonoperational wells, that penetrate the injection formation or production zone; and,
(C) each water well recorded with the department under IC 25-39-1.5;
located within the area of review of the proposed Class II well.
(2) Information for wells identified under this subsection that is a matter of public record and information that should have been known to the applicant regarding the wells must be included under this subsection.
(3) Evidence that all wells identified under subdivision (1) contain an adequate amount of cement and are constructed or plugged in a manner that will prevent the injection fluid and the fluid in the injection formation from entering an underground source of drinking water. The types of evidence that will be considered acceptable by the division include, but are not limited to:
(A) well completion reports;
(B) cementing records;
(C) well construction records;
(D) cement bond logs;
(E) tracer surveys;
(F) oxygen activation logs; and
(G) plugging records.
(4) If a determination is made by the division that any well within the area of review does not contain an adequate amount of cement or is inadequately constructed or plugged, the applicant shall submit either of the following:
(A) Documentation to demonstrate that injection of fluids using the Class II well and formation will not cause contamination of an underground source of drinking water. If the applicant intends to submit evidence of fluid level measurements for any well in the area of review, the fluid level measurements shall be witnessed by an oil and gas inspector.
(B) A corrective action plan describing the measures that will be taken on a well in the area of review to ensure that the well will not serve as a conduit for the migration of fluids into an underground source of drinking water. If approved by the division, the corrective action plan shall be incorporated as a condition of the permit for the Class II well.
(5) A schematic diagram of the proposed Class II well showing the following:
(A) The total depth of the plugback of the well, if any.
(B) The depth of the injection or disposal interval.
(C) The geological name of the injection or disposal zone.
(D) The geological name, thickness, and description of the confining zone.
(E) The vertical distance separating the uppermost extremity of the injection zone from the base of the lowest underground source of drinking water.
(F) The depths of the tops and the bottoms of the casing and the cement to be used in the well.
(G) The size of the casing and tubing and the depth of the packer.
(H) The depth to the base of the lowermost underground source of drinking water.
(6) If the well was originally drilled for purposes other than as a Class II well, a copy of the completion report and any available geophysical log of the well.
(7) If the formation interval proposed to be used for disposal is capable of producing oil or gas, the application shall include a demonstration that the use of that interval for disposal does not constitute waste.
(8) Proposed operating data for the Class II well as follows:
(A) The geological name, depth, and location of the injection fluid source.
(B) For enhanced recovery wells, a description of additives other than produced fluids that are proposed to be injected.
(C) A standard laboratory analysis of a representative sample of fluids to be injected under the proposed Class II permit.
(D) The location and description of each underground source of drinking water through which the well would pass.
(E) A description of the current or proposed casing program, including the following:
(i) Casing size, weight, depth and type.
(ii) Cement volume and type.
(iii) Packer type and setting depth.
(iv) Type of completion for the well and the proposed method for testing casing.
(F) The proposed maximum injection rate and pressure. The maximum allowable injection pressure at the wellhead shall be less than that pressure which might initiate new fractures or propagate existing fractures in the confining

zone adjacent to an underground source of drinking water and cause movement or injection of fluids into an underground source of drinking water. The maximum allowable injection pressure may be determined by one of the following methods:

(i) The immediate shut in pressure (ISIP) method based on a well treatment report which is less than ten (10) years old for the uppermost injection zone. The maximum allowable injection pressure at the wellhead shall be a value of ninety percent (90%) of the ISIP less 14.7 psi.

(ii) The step rate test method performed on the uppermost injection zone. The maximum allowable injection pressure at the wellhead shall be a value of ninety percent (90%) of the lower of the breakover pressure or the maximum pressure reached during the test, less 14.7 psi.

(iii) The pressure calculation formula. The maximum allowable injection pressure at the wellhead may be determined according to the following formula:

Pmax = (0.8 psi/ft - (.433 psi/ft (SG)))d
Where: Pmax = Maximum injection pressure (psia).
SG = Specific Gravity of the injected fluid.
d = Depth to the top of the uppermost injection zone in feet.

(iv) An alternate method approved by the division director based on technical data that can be demonstrated to not initiate new fractures in the confining zone.

312 IAC 29-5-2 Notification to potentially affected parties
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An applicant for a Class II well must serve a written notification describing the proposed well personally or by certified mail to each of the following persons if the described property is located within one-fourth (¼) mile of the proposed Class II well:

(1) Each person who controls:
(A) a well for oil and gas purposes, including a well having temporary abandonment status under 312 IAC 29-32;
(B) a well for oil and gas purposes that is not yet in production; and
(C) an unexpired permit to drill a well for oil and gas purposes.
(2) The permittee of an underground mine permitted under IC 14-34.
(3) A person who files a map under 312 IAC 29-16-1(c) showing the location of commercially minable coal resources.
(4) Each person who controls an underground gas storage or underground petroleum storage reservoir identified under 312 IAC 29-17-1.
(5) Each person having a surface or subsurface property interest.

(b) The notification required under subsection (a) shall specify that a person may, within fifteen (15) days of receipt of the notification, submit written comments or request an informal hearing before the division under 312 IAC 29-3-4. The notification shall include the address to which written comments or the hearing request must be forwarded and where additional information may be obtained including instructions for obtaining a copy of the application.

(c) In addition to the notification required under subsection (a), the applicant shall cause a notice of a permit application to be placed in a newspaper of general circulation in the county where the proposed well is located. The notice must include the following:

(1) The name and address of the applicant.
(2) The location of the proposed well.
(3) The lease name and well number of the proposed well.
(4) The geological name and depth intervals of the injection zones.
(5) The proposed maximum injection pressure.
(6) The proposed maximum rate of barrels each day.

The notice shall specify that a person may, within fifteen (15) days of publication of the notification, submit written comments or request an informal hearing before the division under 312 IAC 29-3-4. The notification shall include the address to which the written comments or hearing requests must be forwarded, how a person may receive written notice of the proceedings, and where additional information concerning the proposed permit can be obtained.

(d) Evidence of each notice served under subsection (a) and evidence of publication of the notice under subsection (c) must be included as part of the application.

312 IAC 29-5-3 Modification to a Class II permit
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) The owner or operator of a Class II well shall submit an application to change a permit condition using a form prescribed by the division before:
(1) changing the injection zone;
(2) adding an injection zone;
(3) changing the maximum allowable injection pressure; or
(4) changing the maximum allowable injection rate.
of a permitted Class II well.

(b) Notice of the request to modify the operation of a permitted Class II well under this section shall be provided according to the requirements of section 2. A copy of the notice and proof of notification shall accompany the application to modify operation of the Class II permit.

312 IAC 29-5-4 Notification of approval or denial of class II UIC well permits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) No permit shall be issued or denied for a Class II well until the later of:
(1) eighteen (18) days after service of any notification required under section 4 of this rule and proof of service of the notification and the publishers affidavit of newspaper publication are submitted to the division ;
(2) the division director's issuance of a determination following an informal hearing conducted in accordance with 312 IAC 29-3-4 and section 4 of this rule.

(b) The division shall provide notice of the approval or denial of a Class II permit, that will include instructions for seeking administrative review under IC 4-21.5, to the applicant and to each person who filed objections or participated in an informal hearing relating to the permit.

(c) A decision to approve or deny a Class II permit is subject to IC 4-21.5.

Rule 6. Additional permit requirements for coal bed methane wells

312 IAC 29-6-1 Coal bed methane well applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. This rule establishes permit requirements for coal bed methane wells in addition to the requirements of 312 IAC 29-4.

312 IAC 29-6-2 Additional permit application requirements for coal bed methane wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. An application for a coal bed methane well permit must include detailed plans for the following:
(1) Well stimulation operations information as follows:
(A) The source and proposed volume of base fluid to be used.
(B) A description of each additive proposed to be included in the well stimulation program including:
(i) The proposed rate or concentration of the additive.
(ii) The product name as identified by the manufacturer on the material safety data sheet.
(iii) A description of the type of or purpose for each additive.

(iv) A copy of any material safety data sheet for each additive product.

(C) Well stimulation design information as follows:

(i) Identification of each coal seam to be stimulated.

(ii) Proposed casing and cementing plan for the well.

(iii) Identification of the principal strata above and below each coal seam.

(iv) The anticipated surface treating pressure range.

(v) The maximum injection treating pressure.

(vi) Face and butt cleat orientation that is known for each coal seam.

(vii) The estimated or calculated fracture half length and fracture height, if known.

(viii) A demonstration that coal seams outside the coal bed methane production area will not be adversely affected by hydraulic fracturing operations and will be adequately protected for future underground mining.

(D) A plan for the flushing of fluids from the well following completion of well stimulation operations including the management and disposal of flow back fluids and solids.

(2) In addition to the requirements in subdivision (1), if hydraulic fracturing operations are proposed, the applicant must identify all of the following:

(A) Known water wells, including water wells identified on the online water well record database of the department's division of water;

(B) Known wells for oil or gas purposes, test holes, or borings which penetrate the coal seam to be hydraulically fractured;

that are located within the greater distance of a radius of five hundred (500) feet or the estimated or calculated fracture half length, from the proposed coal bed methane well.

(3) If wells for oil or gas purposes, test holes, or borings are identified under subdivision (2), and the division determines there is a significant risk they may serve as a conduit for the migration of fluids into an underground source of drinking water, the division director may require the applicant to do the following:

(A) perform remedial plugging operations; or

(B) take other reasonable measures, including modifying the hydraulic fracturing plan;

as necessary to minimize or eliminate adverse impacts to underground sources of drinking water as a result of the hydraulic fracturing operations.

(4) If written consent to the drilling of the coal bed methane well cannot be obtained from a coal owner or coal lessee as required under subdivision (a)(1), in addition to the proof of notification required under subdivision (a)(2), the applicant must submit an affidavit certifying that, upon diligent inquiry, the activities of the applicant with respect to drilling, completing, operating, and abandoning of a coal bed methane well would not result in waste of any commercially minable coal resource and would not endanger the health and safety of underground coal miners. As used in this subdivision, "diligent inquiry" includes reference to the following:

(A) the record of filings maintained by the department and made by coal owners and lessees under 312 IAC 29-14; and

(B) publicly available records pertaining to the thickness and depth of coal that could be regarded as commercially minable coal resources under 312 IAC 29-16.

312 IAC 29-6-3 Horizontal coal bed methane well applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. If horizontal coal bed methane wells are proposed to be completed in a commercially minable coal resource, the application must include the following information:

(1) The proposed length and orientation of each horizontal drain hole;

(2) The measures that would be taken to ensure the drain hole does not deviate into strata above or below the coal seam; and,

(3) Unless a coal owner or a coal lessee gives written consent under IC 14-37-4-8.5(d)(2) a plan for plugging and abandoning the horizontal drain hole portion of the well upon abandonment of the well providing sufficient information to demonstrate to the division director that the methods and materials used will prevent waste of a commercially minable coal resource.

312 IAC 29-6-4 Surface and coal ownership information
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. An application for a coal bed methane well permit must include names and addresses for the following:
(1) The surface owner of the property on which the well is to be located as reflected in the county tax duplicate records or the last known address of the most recent owner shown in the county transfer book.
(2) The owners of each coal seam through which the applicant's well will penetrate.
(3) Any lessee of a coal seam through which the applicant's well will penetrate.

312 IAC 29-6-5 Proof of notification to coal owners and written consent
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) An application for a coal bed methane well permit must include one (1) of the following:
(1) written consent to the drilling of the coal bed methane well from any coal owner and coal lessee identified under section 4 of this rule; or
(2) proof of notification of the applicant's intent to apply for a coal bed methane well permit to coal owners and coal lessees identified under Section 4 of this rule.

(b) Proof of notification to a coal owner or coal lessee may be demonstrated by either of the following:
(A) a certified mail receipt accompanied by a copy of the written notification to the coal owner and coal lessee; or
(B) a written statement from the coal owner and coal lessee acknowledging receipt of the notification.

(c) If coal is subject to a lease, the written consents provided by a coal owner and a coal lessee under subdivision (a)(1) must include a statement acknowledging the recovery of coal bed methane may result in waste of the commercially minable coal resource.

(d) If coal is not subject to a lease, the written consent provided by the coal owner under subdivision (a)(1) must include a statement the coal owner has not leased the coal for coal mining purposes and acknowledging the recovery of coal bed methane may result in waste of a commercially minable coal resource.

312 IAC 29-6-6 Requests to receive notice of the filing of a coal bed methane application
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) A person with experience and interest in mining commercially minable coal resources may request notice of each complete application for coal bed methane well permit when filed.

(b) A person may receive notice under this section by submitting a written request that includes the following:
(1) the name, title, mailing address, e-mail address, and telephone number of the person to whom notice shall be sent; and
(2) the name of the county or counties of interest.

312 IAC 29-6-7 Public notification of receipt of complete coal bed methane application
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) This section establishes requirements for notifying potentially affected persons of the filing of complete applications for coal bed methane well permits and for the filing of comments or objections to the issuance of permits for coal bed methane wells.

(b) Upon determining an application is substantially complete under rule 2 and rule 6 of this article, the division shall publish notice of the coal bed methane permit application on its website. The website shall include the following information:
(1) Permit application date and assigned application number.
(2) Name and address of the applicant.
(3) Lease name and well number.
(4) Well type.
(5) Location of the proposed well by section, township, range, and county.

(6) Proposed depth of the well and the coal seams affected.
(7) Instructions for obtaining a copy of the permit application
(8) Instructions for filing comments or objections, including the deadline for submitting comments or objections under Section 8 of this Rule.

(c) Within fifteen (15) days of the date an application is determined substantially complete under this rule and rule 4 of this article the division shall provide written notice of the coal bed methane permit application to the following:
(1) Each person who requested receipt of notice under Section 6.
(2) Any coal owner, coal lessee, or other person with an interest in developing coal resources who has filed an affidavit with the division under IC 14-37-7-8 and 312 IAC 29-16-1(a)(3).
(3) The surface owner of the property on which the coal bed methane well is to be located.

(d) The notification provided under subsection (c) shall include the following:
(1) Permit application date and assigned application number;
(2) Name and address of the applicant;
(3) Lease name and well number;
(4) Well type;
(5) Location of the proposed well by section, township, range, and county;
(6) Proposed depth of the well;
(7) The coal seams affected;
(8) Instructions for obtaining a copy of the permit application; and,
(9) Instructions for the filing of comments or objections, including the deadline for submitting comments or objections under Section 8 of this rule.

312 IAC 29-6-8 Filing comments or objections on coal bed methane application
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. Any person may file written comments or objections or request an informal hearing related to the coal bed methane permit application as follows:
(1) thirty (30) days after publication as required by subsection 7(b); or,
(2) thirty (30) days from the date of division's notification letter for persons receiving notice in accordance with subsection 7(c).

312 IAC 29-6-9 Approval or denial of coal bed methane permits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. A decision to approve or deny a coal bed methane well permit is subject to IC 4-21.5.

312 IAC 29-6-10 Notice of approval or denial of a coal bed methane permit
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. (a) Notice of a permitting decision, including instructions for seeking administrative review under IC 4-21.5, shall be sent by the division director to the applicant and to the following:
(1) Each person provided notice under Section 7(c) of this rule, and
(2) Each person who filed with the division written comments, objections or request for informal hearing under 312 IAC 29-6-8.

(b) Notice of the permit decision and instructions for requesting administrative review under IC 4-21.5 will be posted on the division's website within three (3) working days following approval or denial of the permit.

Rule 7. Additional permit requirements for noncommercial wells

312 IAC 29-7-1 Noncommercial well applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. This rule establishes permit requirements for noncommercial wells in addition to the requirements of 312 IAC 29-4.

312 IAC 29-7-2 Additional permit requirement for noncommercial wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. In addition to the well survey information required under 312 IAC 29-4-2(e), the survey must also include the permit number, location, and state the depth of each well for oil and gas purposes, including abandoned and nonoperational wells, located within one-fourth (¼) mile of the proposed noncommercial well that intersect the formation to be produced.

312 IAC 29-7-3 Noncommercial wells not conforming to applicable spacing limitations
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. An applicant for a noncommercial well proposing a well location closer than the applicable spacing limitations set forth in 312 IAC 29-12-4 or 312 IAC 29-12-5 shall:

(a) Provide the following information for each well for oil and gas purposes, including wells that are permitted but not yet in production and wells in temporary abandonment status under 312 IAC 29-32-4, intersecting the formation to be produced and located within one-fourth (1/4) mile of the proposed noncommercial well:

(1) The permit number.
(2) The well location.
(3) The name of the owner or operator.
(4) The well depth.

(b) Serve written notification of the application to:

(1) The owner or operator of each well for oil and gas purposes identified under subsection (1); and,
(2) Each property owner located within one quarter (1/4) mile of the proposed well.

312 IAC 29-7-4 Notice Requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The notice required by section 3(b) shall include:
(1) A copy of the permit application;
(2) A statement that the proposed well may be exempted from the well spacing requirements of 312 IAC 29-12;
(3) Advise that operation of the well may result in drainage of gas from the adjacent properties;
(4) Notice that any person who objects to the well spacing exemption may file:
(A) written comments;
(B) objections; and
(C) request an informal hearing under 312 IAC 29-3-4
within thirty (30) days of receipt of the notice; and
(5) The address to which written objections, comments or a request for informal hearing must be filed.

(b) The applicant shall provide proof of notice to the division by submitting:
(1) a certified mail receipt; or
(2) a written statement from the recipient
accompanied by a copy of the written notice.

312 IAC 29-7-5 Approval or denial of noncommercial well permit
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) An exemption from well spacing or unit requirements for a noncommercial well shall not be issued or denied until the later of:
(1) eighteen (18) days after service of the notification required under Section 2; or,
(2) the director's issuance of a determination following an informal hearing conducted in accordance with 312 IAC 29-3-4.

(b) A decision to approve or deny a noncommercial well permit application is subject to IC 4-21.5.

Rule 8. Additional permit requirements for underground gas storage facilities

(Reserved)

Rule 9. Additional permit requirements for underground petroleum storage facilities

(Reserved)

Rule 10. Additional permit requirements for geological and structure test wells

312 IAC 29-10-1 Geological and structure test well applications
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. This rule establishes permit requirements for geological and structure test wells in addition to the requirements of 312 IAC 29-4.

312 IAC 29-10-2 Description of test intervals
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. An application for a geological and structure test well shall identify the objective of the test well and describe the geologic, structural, or hydrogeologic stratigraphic intervals to be tested during and after drilling the well.

312 IAC 29-10-3 Well construction plan
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. An application shall include a well diagram showing the following information:
(1) hole sizes;
(2) casing size, weight, depth and type; and
(3) cement volume and type.

312 IAC 29-10-4 Post testing schedule
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. The application shall include a schedule for the following:
(1) the length of time necessary for conducting the testing operations;
(2) actions to be taken upon conclusion of the testing operations and the timing of either:
(A) converting the well to a production well or a Class II well; or
(B) plugging and abandoning the well.

Rule 11. Drilling in karst prone areas

312 IAC 29-11-1 Purpose
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) This section establishes additional requirements for the drilling of a well for oil and gas purposes in locations identified as karst prone areas. An owner or operator shall drill all wells drilled in an identified karst prone area in accordance with this rule.

(b) The owner or operator shall determine if the well for oil and gas will be drilled in an identified karst prone area from maps maintained by the division.

(c) For wells drilled in karst prone areas an owner or operator shall:
(1) use a cable tool rig, or a rotary drilling rig using air or water to circulate cuttings when drilling the interval between the surface and the depth where surface casing is to be set.
(2) set surface casing in an impervious formation that is:
(A) at least thirty (30) feet below the depth in which karst features or lost-circulation zones are likely to be encountered based on a review of drilling records for wells previously drilled within one half (½) mile of the proposed well location; or,
(B) if previous drilling has not occurred within one half (½) mile of the proposed well location, the minimum surface casing depth shall be into an impervious formation at least thirty (30) feet into the top of the Borden Group for karst developed upon Mississippian aged rocks or thirty (30) feet into the Maquoketa Group for karst developed upon Devonian and Silurian aged rocks.
(d) The driller shall note and record in the drillers log the depth of any areas where voids or lost-circulation zones were encountered while drilling.

(e) Prior to cementing the surface casing, cement baskets shall be installed on the casing at the first joint above each area where voids or lost-circulation zones were encountered. Lost-circulation materials or commonly used cement additives shall also be used where practical to reduce cement loss into karst features.

(f) If voids or lost-circulation zones are encountered while drilling below the surface casing seat, the owner or operator shall take appropriate measures to minimize cement loss into karst features as follows:
(1) Set an intermediate casing string at least thirty (30) feet below the void or lost-circulation zone with a cement basket installed at the first casing joint above each area where a void or lost-circulation zone is encountered. If this method is used, care shall be taken to pump the minimum amount of cement necessary to fill the annulus up to the bottom of the void. Cement shall be placed from the surface by tremie pipe in the casing annulus to cement the interval above the cement basket.
(2) Use lost-circulation materials or cement additives alone or in combination with sufficient cement baskets installed at the first casing joint above each area where a void or lost circulation zone is encountered.

Rule 12. Annual well fee and bonding

312 IAC 29-12-1 Annual well fee and reporting requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) Each owner or operator must pay an annual well fee based on the number of wells for oil and gas purposes for which the owner or operator holds permits as of November 1 of each year.

(b) Each owner or operator must confirm the number of wells and remit the annual fee due under section 2 of this rule to the division no later than February 1 of the following year. Failure of an owner or operator to comply with this subsection is a violation of this article and is cause for revocation of any permit in violation.

(c) A well for oil and gas purposes is included in the annual well fee assessment until the earlier of the following:
(1) The well is plugged and the well site is restored under 312 IAC 29-31.
(2) The well is transferred to a new permittee under 312 IAC 29-4-9.

(d) By February 1 of each year the owner or operator of a well for oil and gas purposes must also report to the division, on a form prescribed by the division, any change in:
(1) mailing address; or
(2) organizational status.

312 IAC 29-12-2 Amount of annual well fee assessment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. The division shall assess the annual well fee as follows:
(1) For one (1) permit, one hundred fifty dollars ($150).
(2) For two (2) through five (5) permits, three hundred dollars ($300).
(3) For six (6) through twenty-five (25) permits, seven hundred fifty dollars ($750).
(4) For twenty-six (26) through one hundred (100) permits, one thousand five hundred dollars ($1,500).
(5) For more than one hundred (100) permits, one thousand five hundred dollars ($1,500) plus fifteen dollars ($15) for each permit over one hundred (100).

312 IAC 29-12-3 Bond required in addition to annual well fee
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) A person who:
(1) has never been granted a permit for a well for oil and gas purposes under IC 14-37 and this article;
(2) has demonstrated a pattern of violations under IC 14-37 and this article for which a civil penalty was assessed under 312 IAC 29-32-4 within the previous two (2) years;
(3) has failed to pay a civil penalty imposed under 312 IAC 29-32-4; or
(4) has failed to pay an annual fee required under IC 14-37-5 and this rule;
shall not be issued a permit for a well for oil and gas purposes under IC 14-37 and this article until the person has filed an acceptable bond as provided in section 4 of this rule.

(b) The bond described in subsection (a) is in addition to the assessed annual well fee imposed by sections 1 and 2 of this rule.

(c) A bond shall be renewed until the earlier there has been compliance with the conditions imposed by IC 14-37, this article and the permit for two (2) consecutive years and the permittee no longer meets any of the conditions in subsection (a)(1) through (a)(4) of this section.

(d) Requirements and procedures applicable to bonds also apply to the substitute securities described in IC 14-37-6-2 and IC 14-37-6-4.

(f) Any person in whose name the permit is issued shall execute and be named as principal on the bond. The name of the owner or operator on the permit and the principal on the bond shall be the same.

312 IAC 29-12-4 Bond types
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The bond required in section 3 of this rule shall consist of any one (1) of the following:
(1) A surety bond in the amount of two thousand five hundred dollars ($2,500) for each well drilled or produced.
(2) A cash bond in the amount of two thousand five hundred dollars ($2,500) for each well drilled or produced.

(3) A certificate of deposit in the principal amount of two thousand five hundred dollars ($2,500) for each well drilled or produced, according to terms and specifications provided by the division.
(4) A surety bond in any amount for wells drilled, deepened, or converted; however, the maximum number of wells under the bond may not exceed that number determined by dividing the principal sum of the bond by two thousand five hundred dollars ($2,500).
(5) A blanket bond of forty-five thousand dollars ($45,000) for any number of wells drilled, deepened, or converted.

(b) No surety bond shall be approved unless issued by a company holding an applicable certificate of authority from the department of insurance, state of Indiana. A surety bond shall be executed by the owner or operator as principal and by the surety or for either of them by an attorney-in-fact with certified power of attorney attached.

(c) The division shall obtain possession and custody of all collateral deposited by an applicant until released or replaced under this rule. A certificate of deposit must be assigned in writing to the state and the assignment noted upon the books of the federally insured financial institution issuing the certificate.

312 IAC 29-12-5 Waiver of annual well fee and bonding requirement for certain noncommercial wells.
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) With respect to a noncommercial well on real estate owned by a resident of Indiana, the division director may waive the annual well fee and bond required by this rule provided the person does the following:
(1) Submits written proof of financial responsibility to operate and maintain the well.
(2) On a division form enters into an agreement to maintain and abandon the well in accordance with IC 14-37 and this article.

(b) A person owning more than five (5) noncommercial wells in Indiana shall not be granted a waiver under this section.

312 IAC 29-12-6 Bond cancellation
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) A surety may provide written notification to the division and the owner or operator of its intention to terminate liability under a bond. The surety shall deliver the notification to the owner or operator by personal service or by certified mail. Proof of service of the notification shall be provided by the surety to the division.

(b) Within thirty (30) days after receipt of a notice under subsection (a), the owner or operator must file a substitute bond or must discontinue operations of any well covered by the bond and plug and abandon the well under IC 14-37 and rule 32 of this article.

(c) If an acceptable substitute bond is filed by the owner or operator, liability on the original bond ceases.

(d) If an acceptable substitute bond is not filed by the owner or operator, or the owner or operator fails to plug and abandon any well according to subsection (b):
(1) the surety's liability under the bond shall not cease; and,
(2) the division shall file a complaint to revoke the permit for the well for oil and gas purposes under IC 4-21.5 and 312 IAC 29-32-5.

(e) If the owner or operator fails to abandon a well as required by IC 14-37 and this article:
(1) the surety must forfeit to the division the principal sum of the bond; or
(2) with respect to a well for oil and gas purposes, the surety may cause the well to be properly plugged and abandoned.

312 IAC 29-12-7 Bond forfeiture
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) The division director may order bond forfeiture if any permit secured by a bond is revoked or if findings of the

division otherwise support a forfeiture.

(b) Bond forfeitures are governed by IC 4-21.5 and 312 IAC 3-1.

312 IAC 29-12-8 Bond release
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. The division shall release a bond submitted pursuant to this rule after:

(a) each well secured by the bond has been plugged and abandoned and the well site restored under IC 14-37, this article, the terms of the permit, and orders of the division;

(b) each well secured by the bond has been converted to a fresh water well;

(c) an acceptable substitute bond is filed by the owner or operator;

(d) each well secured by the bond is transferred under 312 IAC 29-4-9; or

(e) the owner or operator is not required to post a bond under IC 14-37-6-1(a) or section 1(a) of this rule.

Rule 13. Location of wells, drilling units and well spacing

312 IAC 29-13-1 Distance limitation to existing house, barn, or other structures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. A well for oil and gas purposes shall not be located within two hundred (200) feet of a house, barn, building, or other structure (except fences) existing at the time of the permit application without the express consent of the owner of the structure.

312 IAC 29-13-2 Exemption from drilling unit and well spacing requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. The following wells may be exempt from the drilling unit and well spacing requirements in accordance with section 7:

(a) Noncommercial wells, except that a noncommercial well shall not be located such that it would cause an existing commercial gas or coal bed methane well to be in violation of the spacing requirements of this rule.

(b) Coal bed methane wells completed in any of the following:
(1) a void created by mining out a coal seam;
(2) a pillar inside a mined out area of an abandoned underground coal mine; or
(3) gob created by longwall or other methods of coal extraction.

(c) Class II wells;

(d) Gas storage wells;

(e) Gas storage observation wells;

(f) Petroleum storage wells;

(f) Water supply wells; and

(g) Geological or structure test wells.

312 IAC 29-13-3 Drilling units and well spacing for vertical oil wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3(a) For wells drilled or deepened for the production of oil from either the Trenton formation or the Black River formation in the shallow Trenton limestone reservoir region,

(1) the drilling unit shall contain five (5) acres of land, more or less, and

(2) the well shall be located not less than one hundred sixty-five (165) feet from the nearest external boundary lines of the lease or production unit and not less than three hundred thirty (330) feet from the nearest location of any of the following in the same individual reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

(b) For wells drilled or deepened for the production of oil from any formation not specified in subsection (a), the top of which lies less than four thousand (4,000) feet beneath the surface:

(1) the drilling unit shall contain not less than ten (10) acres, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit, and not less than six hundred sixty (660) feet from the nearest location of any of the following in the same reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

(c) For wells drilled or deepened for the production of oil from any formation the top of which lies equal to or greater than four thousand (4,000) feet beneath the surface~~,~~:

(1) the drilling unit shall contain not less than twenty (20) acres, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit, and not less than six hundred sixty (660) feet from the nearest location of any of the following in the same reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

312 IAC 29-13-4 Drilling units and well spacing for vertical natural gas wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) For wells drilled or deepened for the production of natural gas from either the Trenton formation or the Black River formation in the shallow Trenton limestone reservoir region,

(1) the drilling unit shall contain five (5) acres of land, and

(2) the well shall be located not less than one hundred sixty-five (165) feet from the nearest external boundary line of the lease or production unit and not less than three hundred thirty (330) feet from the nearest location of any of the following in the same individual reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

(b) For wells drilled or deepened for the production of natural gas from any sandstone reservoir, not specified in subsection (a) the top of which lies less than one thousand (1,000) feet below the surface,

(1) The drilling unit shall contain ten (10) acres of land, more or less, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit and not less than six hundred sixty (660) feet from the nearest location of any of the following in the same reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

(c) For wells drilled or deepened for the production of natural gas from any formation not specified in subsections (a) and (b), the top of which lies less than one thousand (1,000) feet below the surface,

(1) The drilling unit shall contain twenty (20) acres of land, more or less, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit and not less than six hundred sixty (660) feet from the nearest location of any of the following in the same reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

(d) For wells drilled or deepened for the production of natural gas from any formation, the top of which is greater than or equal to one thousand (1,000) feet below the surface,

(1) The drilling unit shall contain forty (40) acres of land, more or less, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit and not less than nine hundred ninety (990) feet from the nearest location of any of the following in the same reservoir:

(A) a producing well for oil and gas purposes;

(B) a well being drilled for oil and gas purposes; or

(C) the site of a proposed well for oil and gas purposes for which a permit has been issued but the well is not yet drilled.

312 IAC 29-13-5 Drilling units and well spacing for vertical coal bed methane wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. For wells drilled, deepened, completed or converted as a vertical coal bed methane well:

(1) the drilling unit shall contain forty (40) acres of land, more or less, and

(2) the well shall be located not less than three hundred thirty (330) feet from the nearest external boundary line of the lease or production unit and not less than nine hundred ninety (990) feet from the nearest location of any of the following:

(A) a producing coal bed methane well,

(B) a well being drilled as a coal bed methane well; and

(C) the site of a proposed coal bed methane well for which a permit has been issued but the well is not yet drilled in the same coal seam.

312 IAC 29-13-6 Well location exceptions within a drilling unit
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) If, at the time of application, a lease immediately adjacent to a proposed drilling unit owned by a different operator has producing wells completed in the same formation that are located less than the required distance from the external boundary line of the drilling unit as set forth in sections 3 through 5 a well on the proposed drilling unit may be located closer to the external boundary line of the drilling unit than is set forth in sections 3 through 5 but no closer than the distance of the offsetting well to the common boundary line of the drilling unit.

(b) If during drilling of a well, the well is lost due to collapsing hole or casing or other conditions render continued drilling impracticable, the permittee may terminate drilling and move the rig up to thirty (30) feet from the permitted location and commence drilling operations provided:

(1) notification of moving the rig is provided to the oil and gas inspector within ten (10) days;
(2) a new application and fee is submitted within ten (10) days showing the new location of the well.

312 IAC 29-13-7 Approval of alternate drilling units
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) If an area larger than a drilling unit as specified in sections 3 through 5 of this rule is under common ownership or control, the division director may approve the drilling of wells at a greater density than would otherwise be permissible under this rule provided the operator demonstrates the following:

(1) The proposed drilling pattern within the area of common ownership or control is reasonably necessary for more efficient recovery of oil, gas, or coal bed methane;
(2) Waste will not occur;
(3) Unnecessary wells will not be drilled;
(4) The wells maintain the required distance from the nearest external drilling unit boundary line not under common ownership or control as specified in sections 3 through 5 of this rule; and
(5) The wells maintain the required distance from other wells on adjacent drilling units outside the area of common ownership or control producing from the same formation.

(b) Any person with an interest in oil or gas in a lease or drilling unit, including a pool-wide unit, may petition the division director for the establishment of alternative drilling units not otherwise provided in subdivision (a) based on geologic or engineering characteristics of the reservoir relative to the land survey system specified for standard drilling units under sections 3 through 5 of this rule. The petition shall include:

(1) the name and address of the petitioner and all owners of record of oil and gas interests within the petition area;
(2) the name and address of each permittee of record of active wells located in and within (¼) mile of the boundary of the petition area;
(3) the geologic or engineering basis for requesting the alternative drilling unit;
(4) an isopach and structure map of the reservoir showing the productive limits of the reservoir;
(5) a legal land description of the drilling unit sought; and
(6) a demonstration that the alternate drilling unit will not result in:
(A) waste,
(B) unreasonable drainage of oil, gas or coal bed methane from adjacent drilling units, or
(C) the drilling of unnecessary wells.

(c) Upon acceptance of a complete petition under subsection (b), the division director shall schedule an informal hearing under 312 IAC 29-3-4 to consider the request.

Rule 14. Drilling unit and well spacing for directional wells

312 IAC 29-14-1 Drilling units and well spacing for directional wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. For a directional well, the drilling unit shall be established and the well permitted with reference to the location of the well where it is proposed to be completed in the target formation. All portions of the reservoir exposed in the wellbore shall meet the well location and spacing requirements set forth in the section of Rule 13 corresponding to the formation and depth of the proposed directional well.

Rule 15. Drilling unit and well spacing for horizontal wells

312 IAC 29-15-1 Spacing requirements for horizontal wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) A well for oil and gas purposes may be developed with one (1) or more horizontal drain holes drilled from a single vertical wellbore and may be considered a single well for permitting in accordance with this article. A plan for each separate horizontal drain hole or sidetrack proposed from a single vertical wellbore shall be submitted and approved in the original permit for the well or later as a modification to the well permit.

(b) A horizontal well must satisfy all drilling unit and spacing requirements set forth in the section of Rule 13 corresponding to the formation and depth of the horizontal drain hole at every point along the horizontal drain hole portion of the well.

(c) Notwithstanding subdivision (b), the spacing requirements set forth at 312 IAC 29-12-1 shall apply only to the surface location of the vertical portion of the well.

(d) The surface location and vertical portion of the horizontal well may be located on property outside the boundary of the horizontal well drilling unit, if the property is owned by the operator or written authorization is obtained from the property owner.

Rule 16. Underground sources of drinking water

312 IAC 29-16-1 Identification of underground sources of drinking water and exempted aquifers
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) The division may identify (by narrative description, illustrations, maps, or other means) and shall protect, except where exempted under subsections (b) through (c), an aquifer or part of an aquifer that qualifies as an underground source of drinking water. An aquifer or part of an aquifer that is an underground source of drinking water is protected under this rule regardless of whether it has been identified by the division.

(b) The division may identify (by narrative description, illustrations, maps, or other means) and describe in geographic or geometric terms (such as vertical and lateral limits and gradient) that are clear and definite, an aquifer or part of an aquifer proposed for designation as an exempted aquifer under section 8 of this rule.

(c) After notice by publication in a newspaper of general circulation in the county or counties where an affected aquifer is located, and after an opportunity for an informal hearing as provided under 312 IAC 29-3-4, the department may identify an exempted aquifer in addition to a previously exempted aquifer. The exemption of an aquifer under section 2(a)(1) shall be treated as a revision to the approved program of the state for the regulation of Class II wells.

312 IAC 29-16-2 Criteria for exempting an aquifer
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An aquifer or a portion of an aquifer that is an underground source of drinking water may be determined under section 1 to be an exempted aquifer where the aquifer or portion of the aquifer:

(1) does not currently serve as a source of drinking water and cannot now and will not in the future serve as a source of drinking water because it is:

(A) mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated by a permit applicant to contain minerals or hydrocarbons, that, considering their quantity and location, are expected to be commercially producible;

(B) situated at a depth or location that makes recovery of water for drinking water purposes economically or technologically impracticable; or

(C) so contaminated that to render that water fit for human consumption would be economically or technologically impracticable; or

(2) contains fresh water with more than ten thousand (10,000) milligrams per liter of total dissolved solids and is not reasonably expected to supply a future user of fresh water.

(b) A demonstration of commercial producibility under subsection (a)(1)(A) shall be made as follows:

(1) For an enhanced recovery well to be used in a field from which hydrocarbons were previously produced, commercial producibility shall be presumed by the department upon a demonstration by the applicant of historical production in the field.
(2) For a Class II well not located in a field containing an aquifer from which hydrocarbons were previously produced, to the extent available, the department shall consider logs, core data, formation description, formation depth, formation thickness, and formation parameters, such as permeability and porosity.

Rule 17. Protection of commercially minable coal resources

312 IAC 29-17-1 Identification of commercially minable coal seams
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) Regardless of the depth or thickness of a coal seam, the following are considered to be commercially minable coal seams:
(1) A coal seam associated with an underground mine permitted under IC 14-34 which is specifically intended to be mined under the permit.
(2) A coal seam associated with an inactive underground mining operation permitted under IC 14-34 at which mining operations have temporarily ceased and are anticipated to be resumed by the person with the right to develop the seam.
(3) A coal seam which has been identified as a commercially minable coal resource according to the requirements of subsection
(c) by the owner or lessee or other person with the rights to develop the coal seams as depicted on a map accompanied by an affidavit that:
(A) is filed with the division; and
(B) states the coal in the seam is being held for later commercial production by underground mining methods.

(b) For purposes of identifying the location of coal seams described under subsection (a)(1) and subsection (a)(2), the division shall consult with the division of reclamation periodically to identify the location of coal seams that are intended to be mined under a permit issued under IC 14-34 for underground coal mining operations. The division shall make the location of these coal seams available for viewing on its website.

(c) For purposes of identifying the location of coal seams described under subsection (a)(3), an owner, lessee, or other person with the right to develop a coal seam by underground mining methods may submit the following to the division:
(1) A map prepared by a professional engineer licensed under IC 25-31, or a geologist licensed under IC 25-17.6, identifying the coal seam or coal seams by name and showing all of the following:
(A) The location of coal that the owner or lessee controls by deed, lease, or other instrument for later commercial production.
(B) The location of coal that is in an area targeted for later commercial production.
(C) The location of the coal seam or seams of interest.
(D) The approximate depth and thickness of the coal seam or seams of interest.
(E) The location of a coal seam which is associated with a mine referred to under subsection (a)(1) or subsection (a)(2) that is projected to be mined in the future even though the coal seam is outside the boundary of the current permitted area.
(2) An affidavit signed by a professional engineer licensed under IC 25-31 or a geologist licensed under IC 25-17.6 that states any coal seam identified on the map:
(A) can be mined using generally accepted underground mining practices; and
(B) is of sufficient quantity and quality to be commercially saleable.

(d) As provided under IC 14-37-7-8, except for the name of the person and coal owner or lessee who filed the map and affidavit under subsection (c), the division shall maintain the map and affidavit as confidential.

(e) Upon:
(1) inquiry from a person with an interest in oil and gas exploration or drilling operations; or
(2) receipt of a permit application for a well for oil and gas purposes;

the division shall determine if the proposed well location is in an area underlain by commercially minable coal seams identified under this section.

312 IAC 29-17-2 Designating other commercially minable coal resources
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) A coal seam, other than a seam described in section 3 of this document, may also be considered a commercially minable coal resource if information is submitted to the division showing that the coal seam meets all of the following criteria:

(1) Based on core analysis information or other reliable methods, the coal seam is believed to be minable using generally accepted underground practices and suitable equipment;

(2) Based on sufficient core data or other reliable sources of information, it is likely that the coal exists in sufficient quantities and is of sufficient quality to be commercially saleable; and

(3) The seam is:

(A) at least thirty-six (36) inches thick; and

(B) located not more than eight hundred (800) feet below the surface.

(b) A submittal under this section must include the following:

(1) a map depicting the boundary of the area within which the designated coal seam is believed to be commercially minable based on core data or other site specific investigations;

(2) a description of the source and type of data used to support the determination the designated coal seam is believed to be of sufficient quantity and quality to be considered commercially minable; and

(3) the name, address, and qualifications of the person submitting the information.

(c) After consultation with the Indiana geological survey and the division of reclamation, including a review of coal information reports published by the Indiana geological survey, the division will determine whether there is a sufficient basis to consider a coal seam under this section to be a commercially minable coal resource.

(d) The division shall make the location of coal seams identified as commercially minable coal resources, under this SECTION, available for viewing on its website.

(e) A person with either:

(1) an interest in drilling a well for oil and gas purposes; or

(2) an existing well for oil and gas purposes;

in an area with commercially minable coal identified under this section, may rebut the determination in a proceeding conducted under IC 4-21.5.

312 IAC 29-17-3 Additional requirements for locating and permitting of wells
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) This section establishes requirements for the locating and permitting of wells for oil and gas purposes in areas underlain by commercially minable coal resources identified under rule 16 of this article.

(b) For purposes of this section, "waste of the volume of coal" means locating, spacing, drilling, equipping, operating, or producing a well for oil and gas purposes that unreasonably reduces or tends to unreasonably reduce the quantity of commercially minable coal resources ultimately to be recovered from a mine.

(c) Unless the coal owner or coal lessee authorized the drilling of a coal bed methane well, the division may require an owner or operator to make reasonable modifications to the specific location for the drilling of a well for oil and gas purposes if a finding is made that the modifications:

(1) are necessary to protect commercially minable coal resources from waste;

(2) do not violate the drilling unit, well spacing, or other requirements of IC 14-37; and

(3) are necessary to protect the health and safety of miners.

(d) Before submitting an application for a well for oil and gas purposes to the division, the applicant should determine whether the proposed well location is underlain by any of the following commercially minable coal resources:

(1) a coal seam on land within the permit boundary of an active underground mine permitted under IC 14-34 as described in 312 IAC 29-16-1(a)(1);

(2) a coal seam on land within the permit boundary of an inactive underground mine permitted under IC 14-34 as described in 312 IAC 29-16-1(a)(2); or

(3) a coal seam associated with a mine permitted under subdivision (1) or subdivision (2) which is projected to be mined and identified as required under 312 IAC 29-16-1(c)(1)(E).

(e) The owner or operator of a well proposed to be drilled on lands identified under subsection (d) must provide notice of the intent to drill a well to:

(1) the permittee of the mine; or

(2) for an inactive mine, to the person with the right to develop the coal resource.

(f) The notice required under subsection (e) is not required if the permittee of the mine consents in writing to the placement of the well.

(g) The notice required under subsection (e) must follow a format prescribed by the division and must be accompanied by a plat showing the specific location of the proposed well.

(h) The permittee of the mine or other person with the right to develop the coal resource must respond within fifteen (15) days of receipt of the notice whether the specific location for the drilling of the well is likely to result in either or both of the following:

(1) A significant waste of the volume of coal ultimately to be recovered from the underground mine; or

(2) Endangerment of the health and safety of miners.

(i) A person that makes an affirmative determination under subsection (h) with respect to waste of the volume of coal or the endangerment of the health and safety of miners must:

(1) promptly provide a copy of the determination to the owner or operator of the proposed well and to the division; and

(2) identify alternative well locations that would:

(A) reduce or avoid waste of the volume of coal ultimately to be recovered from the underground mine;

(B) eliminate the likelihood of endangerment of the health and safety of miners;

(C) not violate the drilling unit, well spacing, or other requirements of IC 14-37 or this article; and

(D) not result in waste of oil and gas resources.

(j) If the permittee (or other owner of the right to mine the coal resource) fails to respond within the specified fifteen (15) day period provided under subsection (h), the owner or operator may file a permit application for the specified location.

(k) If the permittee (or other owner of the right to mine the coal resource) and the owner or operator of the proposed well agree on a suitable alternate location, the owner or operator may file a permit application for the specified alternate location.

(l) If the permittee (or other owner of the right to mine the coal resource) and the owner or operator of the proposed well are unable to agree on a suitable location for the well, which is not likely to result in endangerment of the health and safety of miners, any of them may request an informal hearing under 312 IAC 29-3-4.

(m) Within thirty (30) days after receipt of a request for an informal hearing, the division director must conduct the informal hearing for the purposes of gathering the following information:

(1) Whether the proposed well location is in an active, inactive, abandoned, or projected underground coal mine permit area.

(2) Whether the proposed well location is in an unsealed inactive area or a sealed area of an active coal mine with the potential for the drilling of the well to introduce oxygen into the area.

(3) The proximity and size of coal pillars in an alternate location that might be drilled through, including whether the alternate location is in a panel or in a support for a submain or main entries.

(4) The equipment technology, operating, and drilling experience history of the owner or operator.

(n) Within fifteen (15) days after the conclusion of the informal hearing and the submittal of any follow-up information which the division director requests from the participants, the division director shall determine whether:

(1) a suitable alternate well location can be identified that is not likely to result in endangerment of the health and safety of miners; and

(2) the location for the well for which notice was provided under subsection (e) is not likely to result in endangerment of the health and safety of miners.

(o) If after the informal hearing the division director:

(1) is unable to identify a suitable alternate location for the well that is not likely to result in endangerment of the health and safety of miners; and

(2) the location for the well for which notice was provided under subsection (e) is not likely to result in endangerment of the health and safety of miners;

the owner or operator is not required to modify the location of the proposed well and may submit a permit application to the division for processing under IC 14-37 and this article.

312 IAC 29-17-4 Additional well completion requirements
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) This section establishes requirements for the completion of wells for oil and gas purposes in areas underlain by the following commercially minable coal resources:

(1) Areas within the permit boundary of an active or inactive underground mine permitted under IC 14-34 as described in 312 IAC 29-16-1(a)(1) and 312 IAC 29-16-1(a)(2).

(2) Areas designated by the owner, lessee, or other person with the right to develop a coal seam identified according to 312 IAC 29-16-1(c).

(b) For wells completed in areas underlain by commercially minable coal resources identified under subsection (a), the owner or operator must set a production string of casing properly centralized and cemented to ensure that adequate cement is placed behind the casing in the area between fifty (50) feet below and one hundred (100) feet above the commercially minable coal seam.

(c) Following completion of the coal seam protection requirements of subsection (b), the owner or operator must prepare and submit to the division an affidavit on a form prescribed by the division that includes the following:

(1) Verification that the commercially minable coal resource was protected as required by subsection (b).

(2) A cross-section drawing of the well showing the location of each centralizer in the completed well.

(3) Evidence that adequate cement was circulated behind the casing as required by subsection (b) including cement tickets showing the volume and type of cement used and copies of any cement bond variable density logs or other similar logs that were run.

(d) The division may require the owner or operator to run a cement bond-variable density log or other similar logging procedure to determine the adequacy of cement bonding if the division director finds either:

(1) adequate cement has not been circulated to protect the commercially minable coal resource; or

(2) centralizers were not placed at locations necessary to properly centralize the casing through the coal seam.

(e) If any logging procedure run under subsection (d) indicates that adequate cement bonding has not occurred between fifty (50) feet below or one hundred (100) feet above the commercially minable coal resource, the owner or operator must perform remedial action as ordered by the division director to ensure adequate protection of the coal seam.

(f) An original copy of the affidavit required under subsection (c) and any logs run under subsection (d) must be submitted to the division within thirty (30) days after the later of the following:

(1) construction of the well was completed; or

(2) completion of any logging procedure under subsection (d).

(g) Concurrent with the submission of the affidavit and any logs to the division under subsection (f), the owner or operator must also submit copies of the documents to any known owner or operator of the commercially minable coal resource.

(h) If the division director finds evidence of a failure to adequately protect a coal seam by an owner or operator under the requirements of this section, the owner or operator must perform additional remedial actions to ensure protection of the coal resource and the health and safety of miners. Significant water, gas, or other fluid movement through the annular space outside the protective casing string and into an underground mine is evidence of a failure to adequately protect the coal seam.

(i) Running any log under subsection (d) or conducting any remedial actions under subsection (h) are at the expense of the owner or operator.

Rule 18. Protection of underground gas and underground petroleum storage reservoirs

312 IAC 29-18-1 Maps depicting boundaries of underground gas and underground petroleum storage facilities
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) An owner or operator of an underground gas storage facility or an underground petroleum storage facility shall file with the division a dated and certified plat or map showing the following:
(1) the limits of gas and the gas filled portion of the reservoir; and
(2) the lease or ownership limits of any existing or proposed underground storage reservoir that the person owns or operates.
The person shall update the plat or map by July 1 of each year or whenever a change of the lease or ownership limits is filed with the division.

(b) Where a plat or map is unchanged from the prior year, the requirements of this section are met upon filing with the division a notification by July 1 of each year that the underground storage reservoir is unchanged from the prior year.

312 IAC 29-18-2 Proof of notification to underground storage reservoir owner
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An applicant for a permit for a well for oil and gas purposes proposed to be drilled in or within one-half (½) mile of an underground gas storage or underground petroleum storage reservoir identified under section 1 must provide notice of the intent to drill a well to the owner or operator of the underground storage reservoir. The notice shall include a plat showing the location of the proposed well and a plan depicting the proposed construction of the well including hole and casing sizes and cementing plans.

(b) The notice required under subsection (a) is not required if the owner or operator of the underground gas or petroleum storage reservoir consents in writing to the drilling of the well.

(c) An owner or operator of the underground gas or petroleum storage reservoir who objects to the issuance of the permit must respond within fifteen (15) days of receipt of notice identifying:
(1) the basis for the objection;
(2) the anticipated adverse effect of the proposed well upon the underground gas or petroleum storage reservoir; and,
(3) those measures, if any, that the applicant for the permit for a well for oil and gas purposes may take to reduce the adverse impact upon the underground gas or petroleum storage reservoir.

(d) If an objection is not filed under subsection (c), the application for a permit for a well for oil and gas purposes shall be approved upon finding that the application meets the applicable requirements under IC 14-37 and this article.

(e) If an objection is filed under subsection (c) the application will be determined as follows:
(1) If the applicant and the owner or operator of the underground gas or petroleum storage reservoir agree on an alternative well location or alternative well construction requirements and the application meets the applicable requirements under ID 14-37 and this article, the application shall be approved.
(2) If the applicant and the owner or operator of the underground gas or petroleum storage reservoir do not agree on an alternative well location or alternative well construction requirements the division director shall conduct an informal hearing

under 312 IAC 29-3-4 and make a determination with respect to the permit application and any protective measures that may be necessary to prevent waste and adverse effects upon the underground gas or petroleum storage reservoir.

(f) A determination under this section is subject to IC 4-21.5.

312 IAC 29-18-3 Use of diverter systems or blowout prevention equipment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. When drilling a well for oil and gas purposes within one-half (½) mile of an underground gas storage reservoir, and to prevent loss of well control when drilling a well for oil and gas purposes through a storage formation, the operator shall use well control equipment and high pressure fittings attached to properly anchored and cemented casing strings adequate to withstand anticipated pressures as specified under 312 IAC 29-19-13(b) and (c).

Rule 19. Integration of interests

312 IAC 29-19-1 Voluntary integration of interests
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) If at least two (2) separately owned tracts of land are located in an area of potential oil, gas, or coalbed methane production, the owners thereof may agree to integrate their interests and to develop their interests in land as a drilling unit or to unitize the production for purposes of conducting secondary, tertiary, other enhanced recovery methods, or for shared facilities among tracts.

(b) The part of the production allocated to the owner or owners of interests in each tract in the drilling unit or unitized area shall be considered as if produced from a well drilled on that tract.

312 IAC 29-19-2 Involuntary integration of interests
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) If the owners or lessees of separate tracts of land located within a proposed drilling unit, or within a pool or part of a pool sought for secondary, tertiary, other enhanced recovery methods, or shared facilities among tracts operated by the same operator, do not agree to integrate their interests, the division director shall, for the prevention of waste or to avoid the drilling of unnecessary wells, require all the owners or lessees to integrate their interests according to the requirements of IC 14-37 and this rule.

(b) A petition may be made by the owner or lessee of a present or future oil and gas interest in a tract of land located within the proposed unit for an order requiring all of the owners or lessees to integrate their interests so that the land may be developed as a drilling unit or unitized for the production from a pool or part of a pool sought for secondary, tertiary, enhanced recovery methods, or shared facilities.

(c) Before submitting a petition to the division director, the petitioner shall have made a diligent attempt to locate and obtain voluntary agreements from all of the other owners or lessees of oil and gas interests in the proposed unit.

312 IAC 29-19-3 Petition for involuntary integration
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. A petition for involuntary integration shall include the following information:
(1) A description of the lands for which the integration is requested including the:
(A) Legal description of the proposed unit area by ¼, ¼, Section, Township, Range, and County;
(B) Size of the proposed unit in acres;
(C) A name requested for the proposed unit;

(D) Location and size of each property and mineral interest therein for which integration is requested.

(2) A list of all the owners or lessees of oil and gas interests within the proposed unit by percentage interest. If the address of any owner or lessee is unknown, the petition shall indicate:

(A) the last known address;

(B) that the current address is unknown; and,

(C) that a diligent search to locate the owner or lessee has been conducted and a bona fide effort has been made to contact the owner or lessee.

(3) A statement as to the details of any trusts, unit agreements, lease agreements or other instruments of conveyance providing the petitioner with an interest in the acreage within the proposed unit.

(4) A description of the potential producing zones and potential hydrocarbons that the petitioner believes may exist within the proposed unit.

(5) A description of the reasons why voluntary integration cannot be achieved including:

(A) A summary of dates of meetings, telephone conversations, and other communications where the issue of leasing or pooling was discussed between the respective parties and the results of those communications;

(B) If negotiations have been conducted, a summary of the details of the final positions of the parties involved.

(6) A statement as to whether the petitioner is prepared to drill a well for oil and gas purposes or operate the proposed unit without the participation of the non-consenting owners.

(7) A statement that the petitioner has prepared a detailed plan for the drilling and operation of the well for oil and gas purposes or operation of the unit, including estimated costs, and is prepared to submit the detailed plan to the division director upon request and to all persons desiring to participate in the costs of drilling and operating the well or unit.

(8) A proposal for allocating the proceeds of production from the proposed unit in a just and equitable manner to each mineral and working interest owner involved.

(9) Maps and exhibits depicting the lands described above and any other information considered by the petitioner to be relevant to a determination of the petition.

312 IAC 29-19-4 Notice to affected owners and informal hearing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) Upon receipt of a complete petition for involuntary integration, the division director shall schedule an informal hearing to be conducted according to the requirements of 312 IAC 29-3-4. The informal hearing shall be for the purpose of gathering information to assist the division director in establishing reasonable terms that provide for the equitable sharing of the proceeds of production from the well or unit.

(b) In addition to the requirements of 312 IAC 29-3-4(e) the notice of the informal hearing shall:

(1) be provided to the petitioner and each owner or lessee identified in the petition;

(2) provide notification of the right to attend the informal hearing and to submit comments on or objections to the petition.

(3) provide notification of the requirement that each non-consenting owner or lessee respond to the division, and serve upon the petitioner, at least five (5) days prior to the informal hearing a statement indicating their willingness to participate with the consenting owners in the sharing of costs for drilling and operating the well and unit.

312 IAC 29-19-5 Determination of reasonable terms and equitable share of the proceeds of production
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) Reasonable terms include establishing a percentage share of ownership of production revenues derived from producing wells that is to be allocated to any non-consenting owner. The ownership interest may consist of one (1) of the following:

(1) Royalty interest which shall not bear any of the cost of exploration, drilling, producing, operating, marketing or any other expense associated with drilling and producing a well or operation of the unit. This amount will shall be at a rate of the greater of:

(A) Twelve and one-half percent (12.5%) of the proceeds from production; or

(B) an acreage-weighted average royalty interest of the leased tracts within the unit.

(2) Working interest in an oil and gas lease granting its owner the right to explore, drill and produce oil and gas from a tract of property. Working interest may consist of one (1) or more of the following:

(A) A full participating interest where the owner is obligated to pay a corresponding percentage of the cost of leasing, drilling, completing, producing, and operating a well or unit;
(B) A carried working interest where the well or unit operator is entitled to receive the first production from a well or unit that would otherwise be credited to the carried working interest owner so that the carried owner's proportionate share of actual expenditures incurred by the operator for the cost of leasing, drilling, completing, producing, operating and abandoning the well or unit is paid to the operator from the production; or
(C) Any other type of working interest including, but not limited to, a net profits interest where the specific facts presented during the informal hearing would suggest that such an interest may be considered reasonable overhead and supervision charges, and any other costs associated with the well or unit and other terms governing joint operations according to normal industry standards.

(b) The following will be considered equitable methods for sharing production proceeds among multiple parcels:
(1) By acreage. This method establishes participation factors for each property within a drilling or production unit. A decimal participation factor is established based on the percentage of acreage each parcel bears to the acreage of the drilling or production unit. The sum of all participation factors for all parcels in the unit shall be one (1.0).
(2) By net recoverable reserves. This method is generally used for secondary or enhanced recovery operations and establishes participation factors for each property within a drilling or production unit using generally accepted petroleum industry practices to determine a reasonable estimate of remaining economically recoverable reserves of oil beneath each property. In determining remaining economically recoverable reserves, the following factors may be considered:
(A) historic production;
(B) net pay thickness;
(C) net hydrocarbon pore volume;
(D) the size, shape, and position of the producing structure; and,
(E) net floodable acreage.
The sum of all participation factors for all parcels in the unit shall be one (1.0). The owner or operator must demonstrate that the factors used in establishing the participation factors for each property are reasonable.

312 IAC 29-19-6 Recovery of additional costs from carried working interest owners
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) This section establishes provisions allowing for the recovery of additional costs incurred by the operator from carried working interest owners that are in addition to the recovery of actual expenses specified under 312 IAC 29-18-5(a)(2)(B).

(b) A well or unit operator is entitled to receive the first production from a well or unit that would otherwise be credited to the carried working interest owner so that the carried working interest owner's proportionate share of actual expenditures incurred by the operator under this section are paid to the operator from the production.

(c) An operator shall be entitled to recover an additional amount of between one-hundred percent (100%) and three-hundred percent (300%) of the cost of drilling, testing, completing and plugging the well as consideration for the additional financial burden taken by the operator in the event the well would have been drilled as a dry hole. The amount of additional costs allowable under this subsection shall be based upon the distance from the well to other productive wells in the same formation and other factors increasing the risk that the well might be a dry hole.

312 IAC 29-19-7 Order of integration; Expiration
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) An order of integration issued by the division director shall expire one (1) year from the date of issuance unless the activity authorized by the order has commenced.

(b) If the activity authorized by the order has commenced within one (1) year from the date of issuance the order shall continue so long as there is production of oil, gas, or coal bed methane from the proposed unit which has not been cancelled by operation of IC 32-23-8.

Rule 20. Well drilling, construction and completion requirements

312 IAC 29-20-1 Posting of permit at well site
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. During drilling, deepening or conversion operations a copy of the permit shall be kept at the well site and available for inspection by the division.

312 IAC 29-20-2 Notification to inspector
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. Before commencing drilling, deepening or conversion operations, the well owner must contact the oil and gas inspector at the telephone number identified on the permit and provide notice of the intention to commence drilling operations.

312 IAC 29-20-3 Access roads, lease roads, well locations, and other construction activities
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) The owner or operator shall construct and maintain access roads, lease roads and well locations to:
(1) avoid springs, seeps and wet areas, where practicable;
(2) prevent runoff from flowing across the road surface or well location unless the road or location is elevated with clean fill or the runoff is diverted around the road or location or otherwise conveyed under the road through the use of culverts or similar conveyances;
(3) prevent the construction of roadways in or across streams and other drainage-ways unless a crossing is constructed with culverts, bridges, or a temporary clean rock rill for low-flow drainage-ways, using commonly accepted design standards that take into consideration the size of the drainage area above the stream crossing;
(4) protect the road and well location surface, ditches, and culvert outlets from erosion which results in the deposition of visible sediment into any stream or off-site drainage ditch; and
(5) prevent mud from being tracked onto a public road.

(b) The owner or operator shall promptly remove mud and deposits of sediment resulting from access roads, lease roads, well sites, pipeline or other utility rights-of-ways and other areas affected by oil and gas production operations from any public road, drainage ditch, stream, or waterway and shall take appropriate measures to stabilize and protect against further off site deposition of sediment or the continued erosion of unstabilized areas.

(c) Examples of appropriate measures that may be considered for compliance with subsection (a) include the use of one (1) or more of the following:
(1) Stabilizing roads and well location surfaces with crushed stone.
(2) Where practical, when wet or muddy conditions are likely during construction, drilling, completion, or workover operations, the use of a temporary stone pad constructed adjacent to a public road should be considered in order to provide an area where trucks, bulldozers, rigs, and other heavy equipment may be loaded and unloaded.
(3) Establish temporary or permanent vegetation.
(4) Use of mulch to stabilize areas in conjunction with the seeding of temporary or permanent vegetative cover.
(5) Construction of ditches to divert runoff away from disturbed areas.
(6) Installation of culverts to direct runoff away from roadways and other disturbed areas.
(7) Stabilization of culvert outlets and ditches with rip-rap.
(8) The use of silt fences, straw bale barriers, sediment traps, vegetative filter strips or other commonly used sediment control measures which remove sediment from runoff prior to discharge onto adjoining lands or streams.

(d) The owner or operator shall obtain any additional federal, state and local permit required for the construction and maintenance of lease roads, access roads and well location as required by this section.

312 IAC 29-20-4 Specifications for well casing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The owner or operator shall determine the type and grade of casing used in a well for oil and gas purposes according to standard industry practices that take into consideration:

(1) The anticipated maximum pressure the casing will be exposed to during the life of the well; and,

(2) factors in the well that could reduce the integrity of the casing during the life of the well including:

(A) harsh chemical environments; and

(B) the potential for mechanical damage.

All casing shall meet the requirements of this section.

(b) Except as provided in subsections (c) and (d), new wells for oil and gas purposes shall be constructed with steel casing that meets at least one (1) of the following minimum requirements:

(1) "Specification for Casing and Tubing", Ninth Edition, published by the American Petroleum Institute (API), July 2011.

(2) Casing shall have an internal pressure rating at least twenty percent (20%) greater than the anticipated maximum pressure to which the casing will be exposed determined as follows:

(A) For new or reconditioned pipe, the mill test pressure may be used to fulfill this requirement.

(B) For used pipe the operator shall pressure test the casing at a pressure at least twenty percent (20%) greater than the anticipated maximum pressure to which the casing will be exposed for a minimum of thirty (30) minutes with a pressure drop of no more than ten percent (10%) to fulfill this requirement.

(c) A water supply well used to provide water in connection with an enhanced recovery well that is drilled to a depth at or above the depth of the lowermost underground source of drinking water may be constructed with casing manufactured of material other than steel provided the casing meets the specifications set forth at IC 25-39-4 and 312 IAC 12-3.

(d) The use of fiberglass casing in the construction of a well for oil and gas purposes may be authorized by the division director upon written request from the owner or operator that includes the following:

(1) a statement of the reason for the use of fiberglass casing;

(2) demonstrating that the casing meets the requirements for fiberglass well casing in "Specification for Fiberglass Casing and Tubing", 3rd Edition, published by the American Petroleum Institute, (API) May, 1987; and,

(3) demonstrating that the casing will provide protection equivalent to steel casing according to the requirements of subsections (a) and (b).

312 IAC 29-20-5 Specifications for cement
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) Whenever any activity specified in this rule provides for the placement of cement, an owner or operator must satisfy this section.

(b) The cement shall comply with:

(1) "Specification for Cements and Materials for Well Cementing", American Petroleum Institute, API Specification 10A, Twenty-Fourth Edition (December 2010); and

(2) "Standard Specification for Portland Cement", ASTM International, ASTM Standard C150/150M-11 (May 2011).

(c) Cement used for cementing well casing under this rule must be class A, C, or H, as described in the "Specification for Cements and Materials for Well Cementing" referenced in subsection (b)(1). The properties and types of cement used, including any cement additives, shall be determined in accordance with commonly recognized industry standards and shall provide for the following:

(1) Securing the casing in the wellbore.

(2) Isolating the wellbore from underground sources of drinking water.

(3) Containing any pressure from drilling, completion, hydraulic fracturing, and production operations.

(4) Preventing the significant loss of cement into voids or lost-circulation zones.

(5) Protecting the casing from corrosion or degradation resulting from geochemical, lithologic or physical conditions of the strata surrounding the casing.
(6) Protecting the integrity of the cement when cementing casing through formations known to contain elevated sulfate concentrations or other geochemical constituents with the potential to adversely affect the integrity of the cement, such as coal seams and associated strata.
(7) Preventing gas flow in the annulus. In areas of known shallow gas or coal bed methane producing zones, gas block additives and low fluid loss slurries shall be used.
(8) Preventing the movement of any fluids in the annulus.
(9) Protecting commercially minable coal resources as required under 312 IAC 29-16.

312 IAC 29-20-6 Use of conductor pipe
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. An owner or operator may use conductor pipe to support unconsolidated materials while drilling and the conductor pipe may be pulled or remain in the well at the discretion of the well owner or operator as follows:
(1) If conductor pipe is to be removed, it shall be pulled before the next outermost string of casing is cemented.
(2) If conductor pipe is to remain, the annulus shall be filled with:
(A) neat cement slurry;
(B) bentonitic grout slurry; or,
(C) alternative materials approved by the division director.

312 IAC 29-20-7 Surface casing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) The owner or operator shall set surface casing according to the requirements of this section unless an alternative well construction method is authorized under section 11. The surface casing shall be cemented in place by circulating cement behind the casing from the setting depth to the surface.

(b) The owner or operator shall provide notice to an oil and gas inspector at least twenty four (24) hours before setting the surface casing.

(c) The cement shall be allowed to set in place for at least four (4) hours and until the cement has developed a compressive strength of at least five hundred pounds per square inch (500 psi) before resuming drilling.

(d) Except as provided in subsection (e) or subsection (f), surface casing shall be set in or through an impervious formation that is:
(1) at least fifty (50) feet below the base of the lowermost underground source of drinking water; or
(2) at a depth less than fifty (50) feet below the base of the lowermost underground source of drinking water provided the next casing string to be set in the well is circulated with cement to a level at least twenty five (25) feet inside the cemented surface casing.

(e) Any well drilled to a total depth of eight hundred (800) feet or less below the ground surface may be completed without surface casing provided the production casing is cemented to the surface and the following are not known to exist at a depth less than eight hundred (800) feet below the ground surface:
(1) underground sources of drinking water;
(2) shallow gas sands; or,
(3) coal seams containing coal bed methane.

(f) A production well completed in either the Trenton Formation or the Black River Formation in the Shallow Trenton limestone reservoir region, may be completed with a surface casing string set in or through an impervious formation at least fifty (50) feet below the top of the Maquoketa Group and cemented to the surface. This string of casing is commonly be referred to as the "water string".

312 IAC 29-20-8 Intermediate casing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. Where an owner or operator uses an intermediate string of casing, it shall be set in or through an impervious formation and circulated with cement from the setting depth to a level at least twenty five (25) feet inside the cemented surface casing or another cemented intermediate casing string. The cement shall be allowed to set in place for at least four (4) hours and until the cement has developed a compressive strength of at least five hundred pounds per square inch (500 psi) before resuming drilling.

312 IAC 29-20-9 Production casing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. (a) An owner or operator shall set and cement production casing according to the requirements of this section unless an alternate well construction method is authorized under section 11.

(b) Except as provided in subsection (c), production casing shall be set at the bottom of the hole or at the top of the last stratum drilled unless the well is plugged back to a shallower formation. The production casing shall be circulated with cement from the setting depth to a level at least twenty five (25) feet inside the next largest diameter cemented casing string.

(c) A well drilled for production from the either the Trenton Formation or the Black River Formation in the Shallow Trenton limestone reservoir region may be completed without an additional string of production casing provided that surface casing meeting the requirements of section 7(f) has been set in the well. In the event that formations between the bottom of the surface casing string and the producing Trenton or Black River interval are water-bearing, the well may be constructed using one of these methods:
(1) with production casing run through an open hole packer set between the water-bearing interval and the producing interval; or,
(2) by isolation of the water-bearing interval by setting an additional casing string cemented with at least one-hundred feet (100') of cement above the water-bearing interval.

312 IAC 29-20-10 Cement job log
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. (a) An owner or operator shall maintain a copy of the cement job log at the well site and available for inspection by the division during drilling operations. The cement job log must include:
(1) the type of cement listing the type and amount of any additive,
(2) the volume,
(3) yield and density in pounds per gallon of the cement; and,
(4) the amount of cement returned to the surface, if any.
(5) Cementing procedural information must include:
(A) a description of the pumping rates in barrels per minute;
(B) pressures in pounds per square inch;
(C) duration in minutes; and,
(D) sequence of events during the cementing operation.

(b) An owner or operator shall submit a copy of the cement job log to the division with the well completion report as required by 312 IAC 29-19-15.

312 IAC 29-20-11 Approval of alternate well construction methods
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 11. (a) The division director may authorize an alternative well construction method if the owner or operator demonstrates the construction method:

(1) will not cause the pollution of, endanger, or threaten any underground source of drinking water;
(2) will not damage a source of oil, gas, or coal bed methane or result in waste; and
(3) is designed to confine formation fluids and injected fluids to the approved interval.

(b) Applications for an alternative well construction method shall include the following information:
(1) A typical cross section depicting:
(A) the various hole and casing sizes proposed;
(B) casing setting depths and cementing information for each casing string including tubing and packers, if proposed;
(C) coal seams and the lowermost underground source of drinking water; and
(D) other water, oil, gas and coal bed methane formations above the producing interval.
(2) A description of the geographical area in which the alternate method is intended to be used;
(3) Other information demonstrating how the alternative construction method will:
(A) afford protection to underground sources of drinking water; and,
(B) will not result in waste.

312 IAC 29-20-12 Use of centralizers
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 12. (a) This section establishes requirements for the use of centralizers in wells drilled after the effective date of this article to ensure that the casing string is centered in the well bore to provide for a uniform thickness of annulus cement in critical areas of the wellbore identified under subsection (c).

(b) An owner or operator shall place centralizers at appropriate casing intervals according to generally accepted industry standards.

(c) Critical areas for purposes of this section include the following:
(1) Surface casing from setting depth to the surface.
(2) Any casing type from fifty (50) feet below to one hundred (100) feet above either of the following if encountered in drilling a well through:
(A) a commercially minable coal resource identified in accordance with 312 IAC 29-16-1; or
(B) any formation used for underground gas or petroleum storage within an active underground gas or petroleum storage facility.
(3) Any casing type from fifty (50) feet below the lowermost underground source of drinking water to the surface;
(4) Production or intermediate casing to ten (10) feet above the surface casing shoe.
(5) Production casing from the shallower of
(A) the setting depth; or,
(B) between fifty (50) feet below to one hundred (100) feet above the uppermost interval in the well to be used for production, disposal or injection.

312 IAC 29-20-13 Well control equipment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 13. (a) During well drilling, completion, and workover operations, the owner or operator shall take precautions necessary to control the well at all times using methods, tests, and procedures as required under this section.

(b) The methods used shall be determined taking into consideration the maximum down hole pressures that may be encountered.

(c) Well control measures include the use of one (1) or more of the following:
(1) water or mud-laden fluid of sufficient weight to provide proper well control;
(2) if temporary kicks are anticipated diverter systems or similar assemblies that divert wellbore fluids away from the rig floor shall be employed to ensure protection against loss of well control; and
(3) well control equipment and high pressure fittings attached to properly anchored and cemented casing strings adequate to withstand anticipated pressures.

(d) Nothing in this section shall prohibit the drilling of wells on air or with cable tools without the use of water or other mud-laden fluids specified in subsection (c)(1) provided other measures are used as necessary to ensure proper well control.

(e) When well control equipment is used during drilling operations, the owner or operator shall equip the well with fittings necessary to circulate out formation gases or liquids. All equipment and fittings shall be rated with normal working pressure ratings that exceed the maximum anticipated surface pressure.

(f) The owner or operator shall perform the following tests and procedures and note in the driller's record, whenever blowout preventers are in use:

(1) Casing attached to a blowout preventer with a pressure rating of greater than three thousand pounds per square inch (3,000 psi) shall be pressure tested after cementing. This pressure test shall be conducted at the anticipated maximum pressure to which the casing will be exposed for a minimum of thirty (30) minutes with a pressure drop of no more than ten percent (10%) to fulfill this requirement.

(2) Well control equipment, except for blind rams, shall be functionally operated at least once in every forty-eight (48) hour period.

(3) Blind rams shall be functionally operated each trip out of the well bore.

(4) The well control equipment shall be pressure tested at installation on the wellhead and after any modification of any equipment or fittings associated with the blowout preventer stack.

(g) At the conclusion of drilling and well completion operations, the owner or operator shall equip the well with wellhead assemblies to maintain surface control of the well. Each component of the wellhead shall have a pressure rating equal to or greater than the maximum anticipated pressure to which that particular component may be exposed during the course of logging, testing, servicing or producing the well.

312 IAC 29-20-14 Construction requirements for flowing oil wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 14. (a) This section establishes requirements for the construction of oil production wells capable of flowing oil to the surface without the aid of a pumping unit or other means of artificial lift. An owner or operator shall not operate a flowing oil well unless it is constructed in accordance with the requirements of this section.

(b) Unless a flowing well meets the requirements and conditions of subsection (c), flowing oil production wells shall be produced through tubing inside a packer set inside the cemented portion of the production string of casing at a point no greater than two hundred (200) feet above the uppermost production interval.

(c) The division director may approve the construction of a flowing well producing oil through the production casing string provided the owner or operator complies with the following:

(1) The production casing is circulated with cement to the surface;

(2) An initial pressure test demonstrates that the production casing has mechanical integrity; and,

(3) the pressure test establishing mechanical integrity is made at least once every five (5) years that the flowing oil well is in operation.

312 IAC 29-20-15 Well completion and re-completion reports
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 15. (a) Within thirty (30) days after the conclusion of drilling, re-drilling, or completion operations, an owner or operator shall file drilling and well completion information on a form prescribed by the division that will include:

(1) The name and location of the well.

(2) A directional survey if the well is a directional or horizontal well.

(3) Information on the construction of the well.

(4) Information on the producing zones and the type of stimulation or treatment performed on each zone.

(5) A log or record of all strata encountered during drilling or deepening including a description of the geologic names and depths of the formations encountered.

(6) The results of all drill stem tests.
(7) Initial production information.
(8) Two (2) copies of all open hole wire line or geophysical logs run on the well.
(9) The cement job log required under 312 IAC 29-19-10.

(b) Upon request by the division, if course are taken, the owner or operator shall do the following:
(1) Provide cuttings and core samples to the division.
(2) Provide at least a forty-eight (48) hour advanced notice to the Indiana geological survey before commencing the coring of any well drilled for oil and gas purposes.
(3) Provide the cuttings and core samples to the Indiana geologic survey

Rule 21. Well drilling pits and completion pits

312 IAC 29-21-1 General drilling and completion pit requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) The discharge of drilling or completion fluids from well drilling, stimulation and completion pits into any surface water or water drainage way is prohibited.

(b) Prior to excavating any drilling or completion pit on tillable land, the owner or operator shall:
(1) determine the location of subsurface drainage tiles in the area of excavation, if any; and,
(2) conduct excavation operations to minimize damage to subsurface drainage systems.

(c) The owner or operator is responsible to repair or replace any subsurface drainage systems damaged during the construction or backfilling of well drilling pits and completion pits.

(d) The owner or operator shall construct and maintain well drilling pits and completion pits as follows:
(1) A sufficient number of adequately sized pits shall be constructed to ensure storage and containment of all fluids.
(2) The pits shall be located the maximum distance possible from streams and other waters of the state.
(3) Adequate freeboard shall be maintained to protect against overflow or accidental discharge of fluids.
(4) Surface runoff shall be diverted away from pits.
(5) Pits located in areas subject to periodic flooding shall be:
(A) emptied of fluids if pit inundation is inevitable; or
(B) protected by adequately sized berms to prevent pit inundation.
(6) Pits shall be used only for the temporary storage of fluid wastes directly resulting from drilling or completion operations
(7) Maintain closed loop systems, where used, in a leak-free condition.
(8) Remove hydrocarbons accumulating on the surface of an unlined pit within forty eight (48) hours of completing drilling operations.

(e) When drilling with cable tools or air rotary equipment, the owner or operator shall provide at least one (1) drilling pit for the deposit of drill cuttings and drilling fluids.

(f) When drilling with rotary drilling equipment using drilling fluids, the owner or operator shall-provide:
(1) at least one (1) reserve pit for the deposit of drill cuttings;
(2) at least one (1) circulation pit for the mixing and circulation of drilling fluids; and,
(3) additional drilling pits, as necessary, for the temporary storage of:
(A) drill cuttings;
(B) drilling fluids;
(C) encountered water;
(D) rig wash water;
(E) spills or leaks from drilling equipment; or,
(F) other fluids associated with drilling operations.

312 IAC 29-21-2 Handling and storage of saltwater-based or oil-based drilling fluid
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) In addition to the requirements of Section 1, if the owner or operator is using saltwater-based or oil-based drilling or completion fluid the drilling or completion pit shall be constructed with a synthetic liner meeting the specifications of subsection (b).

(b) Synthetic liners required under this section shall:
(1) be at least twenty (20) mils thick unless the division director approves, in writing, the use of an alternative material following a demonstration by the owner or operator that alternative liner material will provide equivalent protection.
(2) be overlapped and welded or fused according to manufacturer requirements with a four (4) inch welded seam overlap when the use of a continuous liner is not practical.
(3) be installed over a sand base if a rocky or uneven surface is encountered beneath the synthetic liner material.
(4) completely cover the pit bottom and inside walls.

(c) If drilling or completion activities begin with the use of fresh water drilling fluid and an unexpected condition necessitates conversion to the use of saltwater-based or oil-based drilling or completion fluids, a synthetic liner is not required if the owner or operator:
(1) establishes a mud cake in the drilling pit prior to the use of the saltwater-based or oil-based drilling fluid;
(2) provides notice to the oil and gas inspector before using saltwater-based or oil-based drilling fluid; and,
(3) removes saltwater-based or oil-based drilling fluids from the drilling pit within forty eight (48) hours, or greater period approved in writing by the division director, of completing drilling operations.

312 IAC 29-21-3 Drilling and completion fluid disposal and pit closure requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) Within one hundred twenty (120) days after the conclusion of well drilling operations or sixty (60) days after well completion activities, whichever occurs first, the owner or operator shall remove all pumpable liquids contained in well drilling pits or completion pits to the maximum extent practical, and manage or dispose of the liquids by any of the following methods:
(1) Reuse or recycle the liquid at another drilling location;
(2) For water based well drilling pits and completion pits, land apply the liquid in accordance with the requirements of 312 IAC 29-21-4;
(3) Treat and discharge the liquid at an approved national pollutant discharge elimination system (NPDES) permitted facility.
(4) Dispose of the liquid by injection into a Class II disposal well;
(5) Pump the liquid into the well bore for use as a bottom hole plug if the well is a dry hole and is plugged pursuant to the requirements of 312 IAC 29-31.

(b) After removal of all pumpable liquids from a drilling or completion pit, an owner or operator may bury the remaining contents of a pit used in conjunction with fresh water drilling or completion activities as follows:
(1) the material shall be solidified or stabilized to ensure the physical characteristics of the solidified or stabilized solids closely resemble the stability of adjacent soil materials by combining the material with:
(A) available native soils;
(B) Class A cement; or,
(C) kiln dust.
(2) The burial site shall be:
(A) stable;
(B) not prone to settling; and
(C) restored to conditions that will not interfere with the normal operation of farm equipment.
(c) After removal of all pumpable liquids from a drilling or completion pit used in conjunction with saltwater based or oil based drilling or completion activities, an owner or operator may:
(1) Transport the waste to a permitted landfill authorized to accept the waste; or
(2) Bury the remaining contents of a pit provided the following requirements are met:

(A) A plan for on-site burial has been submitted to and approved by the division director.
(B) Written authorization for on-site burial is obtained from the surface owner.
(C) The pit location is not within three hundred feet (300') of any stream, pond, lake or other body of water or closer than one hundred feet (100') to a property boundary line.
(D) The bottom of the drilling or completion pit is at least three feet (3') above the seasonally high water table.
(E) The material is solidified or stabilized to ensure the physical characteristics of the solidified or stabilized solids closely resemble adjacent soil materials by combining with:
(i) available native soils,
(ii) Class A cement, or,
(iii) kiln dust;
(3) the burial site shall be
(A) stable;
(B) not prone to settling; and
(C) restored to conditions that will not interfere with the normal operation of farm equipment.
(4) The waste is completely encapsulated in the synthetic liner with the top of the waste buried at least five feet (5') below the ground surface.
(5) Within thirty (30) days after drilling or completion pit closure, the owner or operator shall submit a report of pit closure to the division on a form prescribed by the division showing:
(A) the location,
(B) type, and,
(C) approximate dimensions
of the on-site burial area.

(d) Except as provided in subsection (c)(7), any synthetic liner used shall be removed to the fullest extent practicable and properly disposed or recycled.

(e) Within one hundred twenty (120) days after conclusion of well drilling operations or sixty (60) days of well completion operations, whichever occurs first, the owner or operator shall close drilling and completion pits by:
(1) Except as authorized in subsection (c), filling the pit with native material sufficient to ensure that the site is stable and not prone to settling or other subsidence.
(2) Covering the filled area with any stockpiled soil materials at a uniform thickness; and,
(3) Restoring the surface as close as possible to the original land contour.

312 IAC 29-21-4 Land application of water based drilling and completion fluids and drill cuttings
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The owner or operator shall comply with the requirements of this section for land application of fresh water based drilling and completion fluid wastes.

(b) The land application site for drilling and completion fluid waste must meet the following requirements:
(1) To the extent practical, land application shall occur on lands previously disturbed by well site construction and drilling operations.
(2) Unless authorization is obtained from the division director under subsection (e) of this section when land application is not practical under subsection (b)(1), the land application site shall be within the boundary of:
(A) the drilling unit associated with the well that is drilled;
(B a communitization agreement or pooling declaration associated with the well that is drilled; or
(C) a waterflood unit associated with the well that is drilled;
(3) The land application site shall be located at least:
(A) One hundred feet (100') from any water well.
(B) One hundred feet (100') from any stream, pond, lake or other surface water body.
(C) Fifty feet (50') from any unleased property line.

(c) Land application shall not be performed:
(1) during a precipitation event or on occasions when precipitation is likely to occur before the wastes are absorbed or can be incorporated into the soil;

(2) on lands with saturated soils or where water is ponding on the surface;
(3) at any times other than during daylight hours;
(4) in a manner that allows ponding of the drilling or completion fluid waste or allows the discharge of drilling or completion fluid waste into surface waters, ditches or other drainage ways; or,
(5) unless an authorized representative of the well owner or operator is present at the time of land application to ensure compliance with this section.

(d) Only water based drilling and completion fluid wastes meeting the following criteria may be land applied:
(1) Chloride shall be less than one-thousand milligrams per liter (1,000 mg/l).
(2) Total dissolved solids shall be less than one-thousand five-hundred milligrams per liter (1,500 mg/l).
(3) pH shall be greater than 6.5 and less than 9.0.
(4) No visible sheen shall be present on the drilling or completion fluid waste prior to land application.

(e) If the site for proposed land application of wastes is not located within an area provided in subsection (b)(1) of this section, the well owner or operator may apply to the division for authorization to land apply water based drilling and completion fluid wastes on the alternate site. The application shall be on a form prescribed by the division which shall include, at a minimum, the following information:
(1) A copy of written permission to the land application of wastes from the landowner of the alternate site.
(2) A map or diagram showing the proposed application area and a demonstration that the site meets the requirements of subsection (b) of this section.
(3) An estimate of the volume of waste material to be land applied and a demonstration that the waste meets the requirements of subsection (d) of this section.

(f) Upon finding the application for an alternate disposal site meets the requirements of this section, the division shall approve the application. The authorization shall be valid for a period of ninety (90) days.

(g) Within thirty (30) days following the conclusion of land farming operations under this section, the owner or operator shall file with the division a report including the following information:
(1) A map or diagram showing the location of the area of land used for land application of the wastes.
(2) The total volume of waste disposed at this location.

Rule 22. Well stimulation treatments

312 IAC 29-22-1 Applicability
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. The requirements of this rule apply to all well stimulation treatments.

312 IAC 29-22-2 Baseline groundwater monitoring for well stimulation treatments exceeding 5,000 barrels
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) The requirements of this section apply to all operations proposing to utilize five-thousand barrels (5,000 bbls) or more of well stimulation treatment fluid into any formation that is within five-hundred feet (500') vertically of any aquifer currently being used for domestic water supply from a water well located within one-quarter mile (¼) of the surface well location or of any portion of the horizontal drain hole that is to receive fluid from the well stimulation

(b) Prior to conducting any well stimulation, the owner or operator shall collect baseline water samples from water wells existing within a one-quarter (1/4) mile radius of the well surface location or any portion of the horizontal drain hole.
(1) If ten (10) or fewer water wells exist the baseline water samples shall be collected from each water well.
(2) If more than ten (10) water wells exist the owner or operator shall select ten (10) sampling locations based on the following criteria:
(A) Except as necessary to comply with subdivisions (B) and (C) water wells closest to the surface well location or any portion of the horizontal drain hole proposed for well stimulation shall be sampled in a radial pattern around the surface well location.

(B) To the extent groundwater flow direction is known or can reasonably be determined, water wells both down-gradient and up-gradient locations from the surface well location shall be sampled. Where groundwater flow direction is not ascertainable sample locations should be chosen in a radial pattern from the surface well location.

(C) When multiple defined aquifers are present, water wells drilled into each aquifer shall be sampled.

(c) The collection of baseline water samples and laboratory analysis shall be conducted at the expense of the owner or operator of the well to receive the well stimulation treatment.

(d) Water samples shall be collected by a qualified professional utilizing proper sampling protocol and analyzed by a laboratory certified by the Indiana state department of health.

(e) Water sampling shall be conducted not less than seven (7) days nor more than three (3) years prior to initiation of the well stimulation. The results of samples collected under the requirements of this section may be used to satisfy sampling requirements for subsequent oil or gas wells on the same or contiguous drilling sites for a period of up to three (3) years.

(f) If a landowner denies permission for sampling a well, the operator shall document the reasonable and good faith efforts taken to secure such permission.

(g) Samples shall be analyzed for the following minimum parameters using laboratory methods approved by the U.S. Environmental Protection Agency under 40 CFR 136:

(1) pH;
(2) total dissolved solids;
(3) specific conductance;
(4) chloride;
(5) iron;
(6) sulfate;
(7) manganese;
(8) phosphorus;
(9) magnesium;
(10) benzene;
(11) toluene;
(12) ethylbenzene;
(13) xylenes;
(14) dissolved methane; and
(15) sodium.

(h) Copies of all final laboratory analytical results shall be provided to the landowner within forty-five (45) days of collecting the samples.

312 IAC 29-22-3 Spill prevention and containment during well stimulation treatment operations
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) Except as provided in subsections (b) and (c), the owner or operator shall store well stimulation fluids, including treatment additives and frac flowback fluid in above-ground tanks, totes, or other containers recommended by the product manufacturer or supplier at all times until removed for proper disposal, reuse or recycling.

(b) Fresh water used for well stimulation may be stored in unlined excavated surface impoundments if authorized by the division director and the impoundments are constructed and maintained as set forth at 312 IAC 29-21-1

(c) The use of a lined drilling pit meeting the requirements of 312 IAC 29-21-1 and 2 may be used for the temporary storage of frac flowback fluid only in the event of a lack of capacity for tank storage due to higher than expected volume or rate of fluid flowback, or other unanticipated flowback occurrence.

(d) Storage tanks, totes, or other containers recommended by the product manufacturer or supplier must be:
(1) closed, watertight, and corrosion-resistant;

(2) constructed of materials compatible with the composition of the well stimulation fluid and frac flowback fluid and of sufficient pressure rating; and
(3) maintained in a leak-free condition.

(e) Piping, conveyances, and valves in contact with well stimulation fluids and frac flowback fluids shall be:
(1) constructed of materials compatible with the expected composition of the fluid;
(2) of sufficient pressure rating;
(3) able to resist corrosion or abrasion; and
(4) maintained in a leak-free condition.

(f) Each tank, tote, or any other container used to store stimulation fluids, well stimulation-additives, and frac flowback fluids with a capacity of two-hundred fifty gallons (250 gals.) or greater shall be labeled sufficient to identify the contents. Labels on tanks with a capacity equal to or greater than one-hundred barrels (100 bbls) shall be visible from a distance of twenty-five feet (25'). Manufacturer labels affixed to totes and other vessels containing well stimulation chemicals or additives will be adequate for labeling provided the chemicals or additives remain in the original container provided by the manufacturer or distributor.

312 IAC 29-22-4 Spill prevention, containment and response plan for sites with storage capacity exceeding 5,000 barrels.
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The requirements of this section apply to every well stimulation treatment where the total storage capacity of well stimulation fluids on any well location exceeds five thousand barrels (5,000 bbls). In determining the total storage capacity, the combined volume of any of the following which are on a well location and used to store fresh water or well stimulation fluids or frac flowback fluids:
(1) Portable frac tanks and other steel tanks.
(2) Excavated impoundments.
(3) Totes, mixing tanks, tanker trucks, or other storage vessels with a capacity of two-hundred fifty gallons (250 gals.) or greater.

(b) Each well stimulation operation requiring the storage of treatment fluid greater than five thousand barrels (5,000 bbls) as determined under subsection (a) shall have a spill prevention, containment and response plan prepared according to the requirements of this section. The plan shall be:
(1) prepared and signed by an authorized representative of the well owner or operator experienced with conducting well stimulation operations and with sufficient authority to commit the necessary resources required to implement the plan in the event of a spill or other emergency;
(2) available on the site during well stimulation; and,
(3) available for inspection or copying by the division upon request for a period of twelve (12) months after the completion of well stimulation on the well for which the plan was prepared.

(c) Prior to initiating well stimulation operations, all employees, agents, contractors of the owner or operator, or other persons involved with conducting the well stimulation shall receive awareness training regarding the contents of the plan and instructions for implementing spill prevention, containment and response actions according to the procedures contained in the plan.

(d) The spill prevention, containment and response plan required under this section shall include, at a minimum, the following information:
(1) Operator name, well location identification, and date.
(2) Name and telephone number of the contact person responsible for the well operations.
(3) An identification of the distance and direction to the closest sources of surface water.
(4) A list of each tank, impoundment, tote, mixing tank, tanker truck, or other storage vessel with a capacity of two-hundred fifty gallons (250 gals.) or greater, including the storage capacity, to be used for storage or mixing of:
(A) well stimulation chemicals or products, including fresh water;
(B) produced fluids including frac flowback fluids; or
(C) other potentially hazardous liquids.
(5) The location of material safety data sheets for each material or product in use on the well location.

(6) The identification of facility personnel who will implement a spill response action if needed.
(7) The telephone numbers of the following:
(A) The facility emergency response personnel or outside contractor.
(B) The local fire department.
(C) The oil and gas inspector.
(D) The department of environmental management emergency spill response number.
(8) A plan for the inspection of each vessel identified in the plan and associated piping to ensure they are configured and maintained to be free from leaks for the duration of their use on the well location.
(9) An identification of any containment structures that are to be constructed or installed to prevent a discharge from leaving the well location.
(10) A description of the procedures that will be taken to provide an immediate response to a discharge or spill.
(11) The identification of facility personnel or outside contractor who are capable of cleaning up the discharge or spill.

312 IAC 29-22-5 Protection of wellhead equipment and casing during hydraulic fracture stimulation operations
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) The following requirements apply when hydraulic fracturing is performed through a frac string or work string run inside the production casing string:
(1) Unless an alternate design is submitted for approval by the division director, the frac string must either be stung. into a liner or run with a packer set inside the casing with circulated cement to a point within one-hundred feet (100') of the top of the interval being treated by hydraulic fracturing.
(2) The combined production casing and frac string annular hydrostatic pressure and surface pressure shall be sufficient to maintain tubing and packer integrity during hydraulic fracturing.
(3) The production casing and frac string annulus must be monitored during the hydraulic fracturing operations.
(4) A record of the annular pressures observed during hydraulic fracturing operations shall be included with the hydraulic fracturing report required by 312 IAC 29-22-8.
(5) To protect against overpressuring during hydraulic fracturing operations, at least one (1) of the following methods shall be used:
(A) An adequately sized, function tested pressure relief valve and an adequately sized diversion line must be utilized to divert flow from the production casing to drilling or completion pit or a containment vessel in case of frac string failure. The relief valve must be set to limit annular pressure to no more than eighty-five percent (85%) of the lowest internal yield pressure of the frac string.
(B) Electronic pressure trip switches shall be installed on all pumps. The pressure trips shall be set to limit surface pressure to no more than eighty-five percent (85%) of the lowest internal yield pressure of the frac string. Prior to initiating hydraulic fracturing operations, the pressure trips shall be tested to ensure proper functioning.
(6) If the intermediate or production casing string has not been circulated with cement to the surface, the surface casing valve must be fully open and pressures monitored and recorded throughout the treatment.

(b) The following requirements apply when hydraulic fracturing is performed through the production string.
(1) Unless the wellhead and all associated valves and gauges affixed to the well are rated to withstand working pressures at least one-hundred twenty percent (120%) of the maximum design hydraulic fracturing pressure, the well shall be equipped with a wellhead isolation tool or tree saver installed through the wellhead and stung into the production casing. The wellhead isolation tool or tree saver shall be tested prior to initiating hydraulic fracturing operations to ensure proper installation and capability to withstand maximum design hydraulic fracturing pressures.
(2) The production casing shall have primary cement circulated to a point at least one-hundred feet (100') inside the cemented intermediate or surface casing string or be remedially cemented so there is cement from one-hundred feet (100') below the lowermost underground source of drinking water to the surface.
(3) For new wells, prior to perforating the zone to be hydraulically fractured, a pressure test to the maximum treating pressure shall be performed and recorded to no greater than eighty-five percent (85%) of the lowest internal yield pressure for any section of the production casing string. The pressure must be held for at least thirty (30) minutes with less than five percent (5%) loss to a pressure equal to or in excess of the maximum hydraulic fracture design pressure.
(4) For wells other than new wells, a pressure test shall be conducted on the production casing and wellhead to the maximum treating pressure but no greater than eighty-five percent (85%) of the lowest internal yield pressure for any section of the production casing string or wellhead equipment affixed to the well if a wellhead isolation tool or tree saver is not to be used.

(5) If cement was not circulated to the surface during production casing cementing operations, cement evaluation tools may be run to verify cement placement. If there is no verification that cement is present between the wellhead and one-hundred feet (100') below the lowermost underground source of drinking water, or that cement has not been circulated to a point at least one-hundred feet (100') inside the cemented intermediate or surface casing string, a frac string shall be run inside the production casing.

(6) If the intermediate or production casing string has not been circulated with cement to the surface, the surface casing valve must be fully open and pressures monitored and recorded throughout the hydraulic fracturing.

(7) To protect against overpressure during hydraulic fracturing, at least one (1) of the following methods shall be used:

(A) An adequately sized, function tested pressure relief valve and an adequately sized diversion line must be utilized to divert flow from the production casing to the drilling or completion pit or containment vessel in case of frac string failure. The relief valve must be set to limit annular pressure to no more than eighty-five percent (85%) of the lowest internal yield pressure of the production casing string.

(B) Electronic pressure trip switches shall be installed on all pumps. The pressure trips shall be set to limit surface pressure to no more than eighty-five percent (85%) of the lowest internal yield pressure of the production casing string. Prior to initiating hydraulic fracturing, the pressure trips shall be tested to ensure proper functioning.

(8) A record of the pressures observed during hydraulic fracturing shall be included with the hydraulic fracturing stimulation report required by 312 IAC 29-22-8.

(9) When pumping hydraulic fracturing fluids at rates exceeding thirty barrels per minute (30 bpm), the casing tool shall be equipped with diffusers designed to reduce turbulent flow in the upper section of production casing to protect the casing string from excessive erosion.

312 IAC 29-22-6 Well stimulation treatment plans for operations using 5,000 barrels or more of total fluid
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) For every well stimulation using a total of 5,000 barrels or more of stimulation fluid shall have a well stimulation plan prepared according to the requirements of this section. The plan shall be:

(1) prepared and signed by an authorized representative of the well owner or operator experienced in the design and conduct of well stimulation treatment operations;

(2) available on the site during well stimulation; and,

(3) available for inspection or copying by the division upon request for a period of twelve (12) months after the conclusion of well stimulation on the well for which the plan was prepared.

(b) Before initiating well stimulation operations, all employees, agents, contractors of the owner or operator, or other persons involved with conducting the well stimulation shall receive awareness training regarding the contents of the plan.

(c) The well stimulation plan required under this section shall include, at a minimum, the following information:

(1) The age and specifications for surface casing, production casing, and wellhead equipment installed on the well.

(2) Verification of the adequacy and integrity of cement behind each casing string to ensure isolation of well stimulation fluids.

(3) Identify whether well stimulation will be conducted through a frac string on packer or through the production casing.

(4) Describe whether the use of a wellhead isolation tool or tree saver is warranted to ensure protection of wellhead and casing and to comply with the requirements of this rule.

(5) Specify the maximum design surface pressure and measures to be taken to protect against overpressure conditions that could result in failure of well casing strings or wellhead equipment.

(6) Provide a plan for continuous monitoring during well stimulation of surface injection pressure, injection rate, and annuli pressures.

(7) Describe the proximity, condition, and potential impact of the well stimulation on nearby existing and previously plugged oil or gas wells.

(8) Identify the intervals to be treated.

(9) Disclose the volumes and composition of well stimulation fluids and proppants, if used.

(10) Confirm that sufficient storage tank capacity exists to contain anticipated frac flowback fluids.

312 IAC 29-22-7 Notification requirements to the oil and gas inspector
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) At least twenty four (24) hours before commencing a well stimulation using 5,000 barrels of total fluid or more, the owner or operator shall notify the oil and gas inspector of the intention to commence well stimulation operation.

(b) The owner or operator shall verbally notify the oil and gas inspector as soon as practicable but no later than twenty four (24) hours following the occurrence of any of the following incidents during well stimulation regardless of the amount of fluid used in the stimulation treatment operation:

(1) Hydraulic fracturing treatment fluids are returned back to surface due to failures of the casing, tubing, packer or cement, or when discharged from a pressure relief valve installed under 312 IAC 29-22-5(b)(7)(A).

(2) The annulus pressure being monitored increases more than four hundred pounds per square inch (400 psi) during well stimulation.

(3) A spill or discharge of greater than one (1) barrel of any stimulation fluid or frac flowback fluid occurs during well stimulation.

312 IAC 29-22-8 Reporting of hydraulic fracturing information
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. (a) This section establishes requirements for the reporting of hydraulic fracturing information to the division.

(b) Within thirty (30) days following the conclusion of a hydraulic fracturing on a well, including the refracturing of a well, an owner or operator must provide details of the hydraulic fracturing to the division. The information must be provided on a form prescribed by the division that includes the following information:

(1) The volume and source of base fluids used, including location and registration information for any source of water that is a significant water withdrawal facility under IC 14-25-7.

(2) The type and amount of proppant used.

(3) A description of each additive product used, including each of the following:

(A) The trade name of the additive product used as identified by the product manufacturer on the MSDS.

(B) A description of the type of each additive product used.

(C) A description of the purpose for each additive used.

(D) Unless a copy was previously submitted to the division, a copy of the MSDS for each additive product used.

(4) The maximum volume of each additive product used expressed as:

(A) percent (%) by mass of the total fracturing fluid; or

(B) percent (%) by volume of the total fracturing fluid.

(5) The maximum surface treating pressure and injection treating pressure.

(6) Identification of formations stimulated by hydraulic fracturing.

(7) Whether the hydraulic fracturing was performed with a frac string set inside production casing, or through production casing without a separate frac string.

(c) Copies of the following additional information must be submitted along with the hydraulic fracturing report:

(1) Well service company job tickets or similar reports that provide a summary of the products used and the services performed with respect to the hydraulic fracturing. The reports are not required to include cost information for the products or services used.

(2) Pressure recording charts or graphs generated during hydraulic fracturing.

(3) All logs or surveys performed to calculate or map the fracture length and height.

(d) Upon written request by the well operator, the following information may be requested to be held confidential by the division for a period of up to one (1) year from the date of the stimulation operation:

(1) The identification of formations stimulated by hydraulic fracturing.

(2) Supplemental information required under subsection (c) of this section

All other information provided on the form will be placed in the public record for the well and available for inspection by the public.

Rule 23. Well workover requirements

312 IAC 29-23-1 Workover pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1 (a) The discharge of fluids from any activity associated with workover operations to any surface or ground waters or in a location where it is likely to cause pollution to any surface or groundwater is prohibited.

(b) Unless steel tanks are used the owner or operator shall use a lined workover pit to contain all fluids that will be used or generated during workover operations. A workover pit shall either:

(1) be constructed and maintained in accordance with the same requirements as for lined drilling and completion pits under 312 IAC 29-21-1 and 2;

(2) A compacted clay liner may be applied to the bottom and sides of the pit to create an impervious barrier. Construction of the compacted clay liner shall be in accordance with accepted construction and design principles necessary to prevent any leakage or seepage from the pit. The clay used to construct the liner may be in situ or mixed with additional off-site materials, if the on-site clay is inadequate; or

(3) If authorized by the division director after a demonstration is made by the owner or operator that equivalent protection and prevention of leakage or seepage of fluids from the pit can be achieved other materials or methods may be used for liner construction.

(c) Workover pits shall be used only for the temporary storage of workover fluid wastes as provided in this rule and shall not be used for the storage of other wastes that are not directly resulting from workover operations.

312 IAC 29-23-2 Workover fluid disposal and pit closure requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) Within thirty (30) days after the conclusion of well workover operations, all fluids and materials in the workover pit shall be managed according to the requirements of this section and the workover pits backfilled and restored as specified in subsection (d).

(b) The contents of a workover pit shall be removed to the maximum extent practical and, if not reused or recycled at another well location, the wastes shall be disposed of in one or more of the following manners:

(1) Transported to a permitted landfill authorized to accept the waste.
(2) Treatment and discharge of the fluid at an approved national pollutant discharge elimination system (NPDES) permitted facility.
(3) Disposal of the fluid by injection into a Class II well.
(4) Treated or disposed of by other means approved by the division director after consultation with the Indiana department of environmental management.

(c) The synthetic liner shall be removed to the fullest extent practicable and properly disposed or recycled.

(d) The owner or operator shall close a workover pit by:
(1) filling the pit with native soil sufficient to ensure that the site is stable and not prone to settling or other subsidence.
(2) restoring the surface as close as possible to the original land contour; and,
(3) covering the filled area with any stockpiled materials at a uniform thickness.

312 IAC 29-23-3 Reporting requirements following significant workover operations
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) Within thirty (30) days after conclusion of any significant workover operations, the owner or operator shall submit a report of workover operations to the division.

(b) The report shall be completed on a form prescribed by the division that shall include the following:
(1) A tally of tubing run back in a Class II well;
(2) The setting depth of any packer set in the well;

(3) A description of any modifications or repairs made to well casing or liners;
(4) A description and copy of the cementing job record for any remedial or supplemental cementing of well casing;
(5) A summary of hydraulic fracturing;
(6) A description of any geophysical logs run on the well; and
(7) The location and depth interval of any new perforations.

(c) If geophysical logs were run on the well the owner or operator shall provide two (2) copies of each log with the report.

(d) For purposes of this section, a significant workover operation includes any of the following operations:
(1) Setting or unsetting the packer in a Class II well.
(2) Setting or unsetting the packer in an underground gas storage well or an underground petroleum storage well.
(3) Placement or removal of bridge plugs in a well.
(4) Plugging back a well.
(5) Remedial or supplemental cementing of casing or bridge plug.
(6) Installation or removal of casing or liners in a well.
(7) Perforating the production casing in previously unperforated intervals.
(8) Hydraulic fracturing well stimulation treatments.
(9) Any operation which results in a change to the configuration of the wellbore.

Rule 24. Tank Batteries

312 IAC 29-24-1 Registration of tank batteries
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) All tank battery facilities shall be registered with the division as required under this section.

(b) The owner or operator shall register existing tank battery facilities within one-hundred twenty (120) days of the effective date of this article.

(c) The owner or operator shall register new tank battery facilities within thirty (30) days after construction of the facility.

(d) The owner or operator shall register tank battery facilities on a form prescribed by the division which shall include the following information:
(1) The name and address of the facility owner.
(2) The name of lease or production unit for the facility.
(3) The location of the facility by quarter, quarter section, township, range and county.
(4) A map, photos, or sketches of the facility depicting the following information:
(A) the location, number and size of each tank, separator or other processing vessel; and
(B) the location and dimensions of the containment dikes or other containment structures surrounding the vessels.
(5) A demonstration the containment dike or other containment structure meets the requirements of 312 IAC 29-24-3(c).
(6) A plan for the management of accumulated precipitation within the containment dike or other containment structure in accordance with 312 IAC 29-24-3(c) and (d).
(7) If the facility is located within a floodplain as defined at 312 IAC 1-1-15, the plan shall:
(a) demonstrate that the facility meets the requirements of 312 IAC 29-24-4; and
(b) describe measures the owner or operator will take if the facilities are inundated with flood waters:
(i) to prevent the discharge of produced fluids into waters of the state; and,
(ii) to protect tanks, separators and other processing vessels from floating.

(e) Upon fulfilling the requirements of this section, the owner or operator will receive a registration number for the tank battery facility.

(f) The owner or operator shall transfer all tank battery facility registrations at the time associated wells are transferred.

312 IAC 29-24-2 Operating requirements for tank battery facilities
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) This section establishes requirements for the operation of tank battery facilities.

(b) Each tank battery facility shall have a legible sign posted in a conspicuous place on or near the crude oil or produced water storage tanks. The sign shall be a size and shape that is easily read from a distance of twenty (20) feet showing the following information:

(1) The owner or operator name.
(2) The name of the lease or production unit.
(3) The facility registration number assigned by the division.
(4) An emergency telephone number.
(5) The section, township, range, and county of the facility location.

(c) All tank battery facilities shall be surrounded by a secondary containment structure meeting the following requirements:

(1) The capacity of the secondary containment structure shall be designed, constructed, and maintained to contain at least one hundred and ten percent (110%) of the capacity of:
(A) the largest single tank; or
(B) conjoined tanks equipped with manifolds configured so that the fluid level in each tank equalizes as fluids are added to or withdrawn from the conjoined tanks;
located within the secondary containment structure.
(2) Natural or man-made material used for construction and lining of the secondary containment structure shall be:
(A) sufficiently impervious to contain fluids; and,
(B) resistant to corrosion.
(3) Earthen materials used to construct secondary containment structures shall be stabilized and protected from erosion.
(4) Vegetation within or surrounding a secondary containment structure shall not pose a fire hazard.
(5) The interior of a secondary containment structure shall be kept free of excessive vegetation, general oilfield waste or any flammable material.
(6) Accumulated storm water inside the secondary containment structure shall be removed within seventy-two (72) hours of accumulation.
(7) All valves and fittings on storage tanks and other processing vessels shall be operated and maintained to prevent discharges or leaks of produced fluids into the secondary containment structure.
(8) Except as authorized under subsection (d), pipes, conduits, or other drain lines for the purpose of draining accumulated storm water shall not pass through a wall of the secondary containment structure.
The discharge or drainage of storm water or other accumulated fluids to areas outside of the containment dike is prohibited unless authorized under subsection (d).

(d) An owner or operator may be authorized to install a drain line through the wall of the secondary containment structure for the sole purpose of draining uncontaminated storm water as follows:

(1) The owner or operator shall file an affidavit certifying that:
(A) the tank battery facility has been constructed in accordance with subsection (c); and,
(B) a spill prevention, control and countermeasure plan (also known as an SPCC Plan) for the tank battery facility has been prepared according to the requirements of 40 CFR 112.9 and
(2) The owner or operator shall submit a plan identifying:
(A) procedures the owner or operator will use to ensure that discharges of storm water meet the requirements of subdivision (4); and,
(B) the location of the SPCC Plan.

(e) Upon finding that the tank battery facility and plan meet the requirements of this subsection, and that the operator has satisfactorily demonstrated that discharges of uncontaminated storm water from the tank battery facility will be managed in accordance with this subsection, the division director shall issue a written authorization to install a drain line through the wall of the secondary containment structure for the discharge of uncontaminated storm water.

(f) No discharge of uncontaminated storm water from the secondary containment structure is permitted unless written authorization is obtained from the division director. Authorization will be granted only if all of the following conditions are met:

(A) The total dissolved solids content of a representative sample of the fluid is less than seven hundred fifty (750) milligrams per liter.

(B) There must be no visible evidence of hydrocarbons or a visible sheen present on the surface of the water before discharge.

(C) The discharge shall take place only during daylight hours.

(D) The owner, operator or authorized representative shall be present at all times to witness the discharge of the storm water as the drain line valve is open.

(E) The owner or operator shall maintain a written record of each storm water discharge indicating the following:

(i) the facility registration number;

(ii) the volume of storm water discharged;

(iii) the total dissolved solids content;

(iv) the presence of any hydrocarbons or visible sheen; and,

(v) the date and time of the discharge.

The record shall be retained and available for inspection upon request from the division director or the oil and gas inspector for six (6) month after the discharge.

(F) The drain line shall have a valve installed that:

(i) shall remain closed when not in use; and,

(ii) shall be capped or otherwise secured to protect against vandalism and unauthorized or accidental discharges.

(G) A permanent sign shall be placed within five (5) feet of the drain pipe discharge that identifies:

(i) the owner or operator name; and,

(ii) the storm water discharge authorization number assigned by the division for the facility.

(g) Storage tanks, separators or other processing vessels containing produced fluids shall be kept in good repair and free from leaks. Leaking tanks or vessels shall be promptly taken out of service and repaired.

(h) Failure to comply with the provisions of this Rule may result in the withdrawal of the authorization to discharge uncontaminated storm water under this subsection.

312 IAC 29-24-3 Tank batteries in areas subject to periodic flooding
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 3. Where tank battery facilities are located within the one-hundred (100) year floodplain of any river or stream, the owner or operator shall take sufficient precautions so that in the event the secondary containment structures required under section 2 of this rule are overtopped with rising floodwaters:

(1) the water does not cause the storage tanks and other vessels to float; and

(2) no discharge of crude oil or produced fluids into waters of the state occurs.

312 IAC 29-24-4 Enforcement Associated with Tank Batteries
Authority: IC 14-10-2-4; IC 14-37-3-15
Affected: IC 14-37

Sec. 4 Failure to construct, operate and maintain a tank battery facility in accordance with IC 14-37 and this rule may result in the revocation of permits for wells for oil and gas purposes for wells associated with the tank battery facility.

Rule 25. Facility operating requirements

312 IAC 29-25-1 Lease and well identification signs
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) To identify producing leases, the owner or operator shall place durable and weather resistant signs where the principal lease road enters the lease or at another location approved by the inspector. The signs shall be a size and shape that is easily read from a distance of twenty (20) feet showing the following information:

(1) The name of the lease.
(2) The name of the owner or operator.
(3) The name of the manager.
(4) An emergency telephone number.
(5) The section, township, range, and county of the lease.

(b) In addition to the signs described in subsection (a), a durable and weather resistant sign shall also be placed at or near each well on the lease to identify the permit number, well number, and well name. The well identification sign shall be legible from a distance of twenty (20) feet.

(c) Any change in well or lease information required to be posted shall be made to the lease or well signs within sixty (60) days after the change occurs, or in the case of a transfer of ownership, within sixty (60) days after the effective date of the transfer.

312 IAC 29-25-2 Spill prevention, response and reporting
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An owner or operator shall ensure that all activities are conducted to prevent spills or releases of any fluids to:
(1) the surface;
(2) the subsurface; or,
(3) waters of the state;
resulting from, or in connection with the operation of wells for oil and gas purposes under this article, except as authorized by IC 14-37 and this article.

(b) An owner or operator shall initiate the following emergency response procedures for all spills immediately after discovery:

(1) Stop or contain ongoing discharge or release of the fluids to minimize the area affected by the spill.
(2) Report the spill if required under subsection (c).
(3) Compliance with the emergency spill response coordinator of the Indiana department of environmental management for spills entering surface waters.
(4) Storage of recovered fluids in above ground storage tanks or other leak free above ground vessels for temporary storage until recycled, reclaimed, or disposed in accordance with this article.
(5) Contain and remove free liquids on the land surface by the placement of:
(A) absorbent booms or other absorbent materials;
(B) emergency excavations;
(C) vacuum trucks; or
(D) by other collection means
designed to prevent migration of the spilled liquids.
(6) Manage contaminated soils and absorbent materials in accordance with 312 IAC 29-25-4 unless directed otherwise by the emergency spill response coordinator of the Indiana department of environmental management.

(c) Spills or releases of fluids resulting from, or used in connection with the operation of wells under this article shall be reported by the owner or operator to the appropriate agency within the specified time period as required in the following tables:

Table 1: Crude Oil Spill Reporting

Location of the Spill	Fluid Volume	Agency to be Notified	Time Period	Type of Notification	Contact Information
Inside secondary containment structure	**Greater than 5 barrels**	**DNR Oil & Gas Division**	**48 hours of discovery**	**Telephone** **AND** **Email**	**Oil and Gas Inspector** **SPILL@dnr.in.gov** **(DNR)**
Outside secondary containment structure but onto lands within the lease or facility boundary	**Greater than 1 barrel**	**DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**Oil and Gas Inspector** **SPILL@dnr.in.gov** **(DNR)**
Outside the lease or facility boundary but not into waters of the state	**Greater than 1 barrel**	**Indiana Department of Environmental Management** **AND** **DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**(888) 233-8603 (IDEM)** **SPILL@dnr.in.gov** **(DNR)**
Enters waters of the state	**Visible sheen**	**Indiana Department of Environmental Management AND** **DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**(888) 233-8603 (IDEM)** **SPILL@dnr.in.gov** **(DNR)**

Table 2: Produced Water, Contaminated Storm Water, and Drilling, Completion, and Workover Fluid Spill Reporting

Location of the Spill	Fluid Volume	Agency to be Notified	Time Period	Type of Notification	Contact Information
Inside secondary containment structure	**Greater than 10 barrels**	**DNR Oil & Gas Division**	**48 hours of discovery**	**Telephone** **AND** **Email**	**Oil and Gas Inspector** **SPILL@dnr.in.gov** **(DNR)**
Outside secondary containment structure but onto lands within the lease or facility boundary	**Greater than 5 barrels**	**DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**Oil and Gas Inspector** **SPILL@dnr.in.gov** **(DNR).gov**
Outside the lease or facility boundary but not into waters of the state	**Greater than 55 gallons**	**Indiana Department of Environmental Management AND** **DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**(888) 233-8603 (IDEM)** **SPILL@dnr.in.gov** **(DNR)**
Enters waters of the state	**Any volume**	**Indiana Department of Environmental Management AND** **DNR Oil & Gas Division**	**2 hours of discovery**	**Telephone** **AND** **Email**	**(888) 233-8603 (IDEM)** **SPILL@dnr.in.gov** **(DNR)**

Table 3: Other Chemical Spill Reporting

Location of the Spill	Fluid Volume	Agency to be Notified	Time Period	Type of Notification	Contact Information
Lands within the lease or facility boundary	Greater than 55 gallons	DNR Oil & Gas Division	2 hours of discovery	Telephone AND Email	Oil and Gas Inspector SPILL@dnr.in.gov (DNR)
Outside the lease or facility boundary but not into waters of the state	Greater than 55 gallons	Indiana Department of Environmental Management AND DNR Oil & Gas Division	2 hours of discovery	Telephone AND Email	(888) 233-8603 (IDEM) SPILL@dnr.in.gov (DNR)
Enters waters of the state	Any volume	Indiana Department of Environmental Management AND DNR Oil & Gas Division	2 hours of discovery	Telephone AND Email	(888) 233-8603 (IDEM) SPILL@dnr.in.gov (DNR)

(d) At a minimum, initial spill reports required by subsection (c) shall include the following information:
(1) The name of the permittee responsible for the spill.
(2) The location of the spill.
(3) The volume of fluid spilled.
(4) The identity of the fluid spilled
(5) The areal extent of the spill.
(6) The cause of the spill.
(7) Contact information, including the telephone number and name of the person familiar with the incident.

(e) Nothing in this section shall relieve a person from an obligation to report oil or chemical spills when required under applicable local, state and federal law.

(f) Within thirty (30) days following the discovery of any spill required to be reported under subsection (c), the owner or operator shall file a final report on a form prescribed by the division identifying:
(1) details of the incident;
(2) factors contributing to the incident; and,
(3) preventive measures that have or will be taken to protect against similar future incidents.

312 IAC 29-25-3 Reporting of fires and blow-outs
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) In addition to the reporting requirements for spills in section 2, an owner or operator shall report all fires or any blow-out or other incident involving the loss of control of a well or any facility associated with the drilling operation or plugging of wells for oil and gas purposes to the division within two (2) hours of discovery by telephone to the inspector, and by email to SPILL@dnr.in.gov.

(b) The report shall include the following:

(1) Identify the location of the fire, or blow-out by lease name, if known, and directions to the site.
(2) Provide the name of the owner or operator of the well or facility involved.
(3) Indicate whether local emergency response personnel have been notified.
(4) Emergency measures taken or in progress to contain or control the incident.

(c) Within thirty (30) days following the incident, the owner or operator shall file a final report on a form prescribed by the division identifying:
(1) details of the incident;
(2) factors contributing to the incident; and,
(3) preventive measures that have or will be taken to protect against similar future incidents.

312 IAC 29-25-4 Management and disposal of contaminated soils
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. The owner or operator shall manage crude oil and produced water contaminated soils and contaminated absorbent materials by either or both of the following methods:
(1) Disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept the waste; or
(2) remediated in accordance with the requirements of section 5.

312 IAC 29-25-5 Remediation of contaminated soils
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) Soils that have been contaminated by crude oil or produced water may be conducted in accordance with this section at the site of the contamination or at another location authorized by the division

(b) The division may authorize an owner or operator to remediate contaminated soils at a location other than the site of the spill or release following consideration of a request made on a form prescribed by the division including the following information:
(1) The location and size of the proposed remediation site.
(2) Authorization from the surface owner to perform remediation operations at the location.
(3) An estimated volume of soils to be treated.
(4) The source of the contaminated soil.
(5) The method to be used to actively manage the remediation of contaminated soils at the site.

(c) Contaminated soils less than eight inches (8") deep shall be remediated at the site of the contamination.

(d) Contaminated soils extending to a depth greater than eight inches (8") shall be excavated and redistributed in a uniform layer on the surface of the remediation site authorized by the division in accordance with subdivision (b) to a depth no greater than eight inches (8").

(e) Contaminated soil remediation areas shall be actively managed by the owner or operator by the use of commonly accepted remediation and bioremediation methods so the soils meet the following standards within twelve (12) months after the date of the spill:
(1) Soils contaminated with crude oil must contain less than one percent (1%) total petroleum hydrocarbons (TPH).
(2) Soils contaminated with produced water must contain less than one-thousand milligrams per liter (1,000 mg/l) of chloride.

(f) The division may require an owner or operator to take other remediation action or remove the affected soil for disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste if the soils do not meet the standards set forth in subdivision (e) within twelve (12) months.

(g) Active management, for purposes of subsection (e), involves the use of commonly accepted agricultural practices which are widely recognized as creating a soil environment favorable for cultivating microorganisms and other conditions which assist with the cleanup and remediation of contaminated soils. These practices usually include:

(1) the incorporation of fertilizer, lime, and organic matter, as appropriate, into the soil material by tillage; and,

(2) ensuring ~~that~~ the site receives adequate moisture;

to enhance biologic activity or promote the removal of contaminates from the soil. Acceptable management practices are those published by the Integrated Petroleum Environmental Consortium (IPEC) in its "IPEC Guidelines for Bioremediation of Crude Oil Spills" dated January 12, 2004 and "IPEC Guidelines for Remediation of Small Brine Spills" dated January 12, 2004".

312 IAC 29-25-6 Oiling of lease roads and county roads
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) Crude oil or crude oil tank bottoms shall not be applied to the surface of lease roads or county roads except as authorized under this section.

(b) Disposal of oil and gas NORM waste on lease road or county roads is prohibited.

(c) Before applying oil to any lease road or county road the owner or operator shall obtain authorization on a form prescribed by the division that shall include the following information:

(1) the location of the lease or unit from which the crude oil or crude oil tank bottoms will originate;

(2) the location of the lease road or county road to which the crude oil or crude oil tank bottoms will be applied;

(3) the name and address of the permittee;

(4) the method to be used for application of the oil or bottom sediments;

(5) a map showing the lease roads to be oiled and the location of all ditches, streams, ponds, or other impoundments within one hundred feet (100') of the lease road; and

(6) written consent allowing the crude oil or bottom sediment application from

(A) the current surface owner if the application site is a lease road; or,

(B) the county board of commissioners if the application site is a county road.

(d) Upon receipt of written approval from the division, crude oil or crude oil tank bottoms may be applied to lease roads or county roads as follows:

(1) The materials shall be applied to avoid run-off from the road surface during application

(2) All applied liquids not absorbed into the road surface shall be incorporated or otherwise removed to eliminate freestanding liquids.

(3) A lease road or county road must not be oiled more than twice in a twelve (12) month period.

(4) Road oiling shall not be conducted when:

(A) the ground is frozen;

(B) during precipitation events; or,

(C) the road surface is saturated.

(5) Crude oil tank bottoms used for road oiling shall not have a produced water content of greater than ten percent (10%) free water by volume.

(e) An authorization for road oiling under this section remains valid for as long as the lease or unit is active under the current permittee unless:

(1) withdrawn by the division for cause, or

(2) the consent required under section (b)(6) is withdrawn by the surface owner or the board of county commissioners for any reason.

(f) An authorization for road oiling is not transferable to another owner or operator.

(g) An authorization for road oiling is terminated by a change in surface ownership unless the new surface owner provides written consent to the continued application of crude oil or crude oil tank bottoms to the lease road.

(h) The application of crude oil or crude oil tank bottoms to lease roads or county roads without prior written authorization from the division or in a manner other than as provided in this section shall be considered a violation of this article and subject to enforcement action in accordance with rule 33. In addition to all other enforcement action the division shall require crude oil and crude oil tank bottoms applied to lease roads or county roads in violation of this section be removed from and properly disposed according to the requirements of section 4.

312 IAC 29-25-7 Flowlines
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. (a) Except as provided in subsection (b), an owner or operator shall bury all flowlines constructed or replaced after the effective date of this article used in connection with the operation of wells for oil and gas purposes at least thirty six (36) inches below the ground surface.

(b) The division may approve an exemption from the burial requirements under subsection (a) if either or both of the following apply:
(1) Topographical features, land uses or ground conditions prevent compliance with subsection (a); or
(2) The terms of the oil and gas lease prohibit the burial of flowlines.

(c) Flowlines crossing streams shall comply with the permitting and construction requirements of IC 14-28-1-22 and 312 IAC 10-4 and 312 IAC 10-5.

(d) The owner or operator shall not use culverts to convey flowlines under any public road without written authorization from the applicable county road management authority or the Indiana department of transportation.

(e) The owner or operator shall construct, operate and maintain flowlines, including all fittings, valves, pumps, meters, gauges and other appurtances attached to the flowline to be leak free. Leaks or spills from a flowline shall be reported and cleaned up as required under this rule and appropriate repairs made to maintain flowline integrity.

(f) Flowlines shall not have an outlet valve installed for the purpose of discharging fluids between the place or well of origin and the authorized storage or disposal point. A specialized valve, installed for the purpose of venting trapped air, following flowline maintenance is permissible.

(g) Upon abandonment of any buried flowline, the owner or operator shall, to the extent practical, drain the line of any fluid and cap or seal the ends of the abandoned flowlines.

312 IAC 29-25-8 Powerlines
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. (a) The owner or operator shall install all power lines after the effective date of these rules by:
(1) burial at least thirty-six (36) inches below the ground surface; or
(2) elevation on power poles at least fourteen (14) feet above the ground surface.

(b) The owner or operator shall elevate above ground power lines installed before the effective date of these rules as specified in subsection (a) if the division determines, after consultation with the landowner, that the power lines pose a hazard to public safety.

312 IAC 29-25-9 General oilfield wastes
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. An owner or operator shall keep well sites and all facilities associated with the drilling, operation or plugging of wells for oil and gas purposes free from general oilfield waste unless such waste is stored in covered leak-free containers.

312 IAC 29-25-10 Equipment storage
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. (a) For purposes of this section, equipment means any vehicle, rig, tool, bit, cable, storage vessel, processing or treatment vessel, casing, pipe and other tubulars, valve, gauge, pump, compressor, meter and any other device, part or hardware of any kind used in the operation of a well for oil and gas purposes.

(b) Except for locations designated by the owner or operator that are used for the storage of equipment intended for use in the drilling and operation of wells for oil and gas purposes, the owner or operator shall not store unused equipment on a lease or unit except:

(1) on a temporary basis; and

(2) in a specifically designated area

while arrangements are made for the sale, recycling, or disposal of the equipment or equipment debris.

312 IAC 29-25-11 Maintenance of well heads, fittings and equipment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 11. (a) An owner or operator shall install and maintain a well head rated to withstand maximum expected downhole pressures on each well completed for oil and gas purposes except:

(1) when removal of the well head is necessary to perform maintenance on the well or to plug the well; and,

(2) other measures are taken to maintain control of the well at all times and prevent the release or discharge of gas or fluids from the well.

(b) Each well head and associated valves, fittings and equipment shall be maintained in a leak-free condition and equipped with sufficient valves and fittings to monitor casing and tubing pressures.

(c) The well head on each Class II well shall be configured to include a one quarter inch (¼") female fitting, with shut-off valve, to allow monitoring of the annulus between the production casing and the injection tubing. An additional one quarter inch (¼") female fitting, with shut-off valve, shall be installed on the tubing to measure the injection pressure.

(d) Any well that is not equipped with casing that has been circulated with cement as required under rule 19 shall be configured to include a one quarter inch (¼") female fitting, with shut-off valve, to allow monitoring of the annulus between the production casing and the surface casing as required under 312 IAC 29-19-14.

312 IAC 29-25-12 Reporting and correcting casing failures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 12. (a) Whenever casing failure is suspected in any well, the owner or operator shall notify the inspector within seventy two (72) hours of discovery.

(b) The owner or operator shall replace or repair defective casing in a well within ninety (90) days of discovery unless a plan for correcting the casing failure is approved by the division director or the operator equips the well for production through tubing and packer and a demonstration is made to the division that the well will be operated in a manner protective of underground sources of drinking water.

312 IAC 29-25-13 Registration of existing concrete production fluid storage structures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 13. (a) Within one hundred twenty (120) days of the effective date of this article, an owner or operator of an existing concrete production fluid storage structure shall register the structure with the division. .

(b) The division shall prescribe the form and other information to accompany registration that shall include the following:
(1) Name and address of the structure owner.
(2) Name of lease or production unit for the structure.
(3) The location of the structure by quarter, quarter section, township, range and county.
(4) A map showing the location of the structure that indicates the distance and direction from the structure to the nearest public road intersection or other prominent landmark.
(5) A plan view or sketch of the structure depicting the length, width, height and maximum design capacity of the structure.
(6) The age of the structure, if known, or the date the structure was first used by the current owner or operator.

(c) The division will assign a registration number for each concrete production fluid storage structure and acknowledge receipt of the registration application by furnishing a registration number to the facility owner.

(d) All concrete production fluid storage structure registrations shall be transferred at the time of associated well transfers.

312 IAC 29-25-14 Registration and approval of new concrete production fluid storage structures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 14. (a) An owner or operator shall submit a plan for the construction and operation of a new concrete production fluid storage structure for approval by the division. A new structure shall not be constructed until a determination is made that the plan meets the requirements of this section and the division has issued a registration number to the structure.

(b) The division shall prescribe the form and other information to accompany the plan which shall include the following:
(1) Name and address of the owner of the structure.
(2) Name of lease or production unit for the structure.
(3) The location of the facility by quarter, quarter section, township, range and county.
(4) A map showing the location of the structure that indicates the distance and direction from the structure to the nearest public road intersection or other prominent landmark.
(5) A plan view or sketch depicting the length, width, height and maximum design capacity of the structure.
(6) A plan view of the subsurface drainage and monitoring system to be installed beneath the structure to meet the requirements of 312 IAC 29-24-18(b).
(7) A demonstration that the location of the structure meets the location requirements under section 15(a).
(8) Where any portion of the proposed structure will involve excavation, fill, or the construction or erection of structures within the one-hundred (100) year floodplain of any river or stream , the plan shall include the following:
(A) A demonstration that the top of the structure will be at least two (2) feet above the one-hundred (100) year flood elevation; and
(B) one (1) of the following:
(i) written confirmation from the division of water that a permit is not required under IC 14-28-1; or
(ii) an application for construction within a floodway under IC 14-28-1.

312 IAC 29-25-15 Location, construction, and operating requirements for concrete production fluid storage structures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 15. (a) New concrete production fluid storage structure shall not be located:
(1) within two hundred (200) feet of an existing occupied dwelling, unless written consent is obtained from the owner of the dwelling consenting to the construction and operation of the structure closer than two hundred (200) feet;
(2) within two hundred (200) feet of a domestic water well or one thousand (1,000) feet of a public water supply well;
(3) within two hundred (200) feet of a stream, lake, pond or other body of water unless the operator demonstrates that construction standards or topography will prevent any discharge from the concrete storage structure; or
(4) within the one-hundred (100) year floodplain of any river or stream unless the top of the structure will be at least two (2) feet above the one-hundred (100) year flood elevation, and
(A) a permit is obtained for construction within a floodway under IC 14-28-1; or
(B) written confirmation is received from the division of water stating that a permit is not required under IC 14-28-1.

(b) New concrete production fluid storage structures shall be constructed utilizing standard industry practices using formed concrete bottoms and sides and shall be underlain by a drainage system constructed and operated to detect any discharge or release of fluids from the sides or bottom of the structure. The drainage system shall be constructed to allow the monitoring and sampling of fluids present under the structure.

(c) The division director require the owner or operator of a concrete production fluid storage structure to submit as built plans to demonstrate that the structure has been constructed to meet the requirements of this section.

(d) Fluids accumulating in a drainage system constructed beneath any concrete production fluid storage structure shall be sampled quarterly by the owner of the structure and analyzed for chlorides and total dissolved solids by an independent laboratory. A copy of the results of the sampling and analysis shall be maintained at the facility offices for review by the division. Unless other parameters are approved by the division director, if:

(1) the chlorides are greater than five-hundred milligrams per liter (500 mg/l); or,

(2) total dissolved solids are greater than seven-hundred fifty milligrams per liter (750 mg/l);

the division shall be notified within five (5) days and the concrete production fluid storage structure shall be drained, inspected, and repaired according to the requirements of subsection (g) before being returned to service.

(e) An out of service inspection shall be performed on all concrete production fluid storage structures according to the following requirements:

(1) For existing concrete structures not constructed with a subsurface drainage system to monitor and detect the discharge or release of fluids from the structure, an initial inspection shall be performed within twelve (12) months after the effective date of this article, and every five (5) years thereafter.

(2) For concrete structures constructed with a subsurface drainage system to monitor and detect the discharge or release of fluids from the structure, an inspection shall be performed within thirty (30) days following the receipt of sampling data from a subsurface drainage system under subsection (d) showing elevated chloride or total dissolved solids levels.

(3) The following are required actions to be taken each time an inspection is conducted of a concrete structure under this subsection:

(A) The structure shall be taken out of service and drained of all contents.

(B) Where oily solids or other debris are present which would interfere with the visual inspection of the concrete surface, power washing shall be performed to remove such deposits.

(C) The owner of the structure shall notify the division inspector at least five (5) days in advance of performing the visual inspection so that the inspector may be present to witness the inspection.

(D) All interior surfaces of the concrete structure shall be visually examined to determine the presence of cracks, holes, crevices or other visible indications of potential leakage.

(E) Repairs shall be made to all areas of potential leakage identified by the visual inspection and the repairs shall be inspected by the division inspector before returning the structure to service.

(F) A report showing the results of the inspection and any remedial repairs shall be submitted to the division within thirty (30) days after performing the inspection and making any repairs.

(f) Puncturing or perforating the sides or bottom of any concrete production fluid storage structure is prohibited except as required upon abandonment of the structure under 312 IAC 29-24-19(e).

(g) Concrete production fluid storage structures shall be maintained with at least two (2) feet of freeboard from the top of the structure to prevent the unintentional discharge of wastes or fluids from the structure.

(h) Surface water drainage shall be diverted away from all concrete storage structures.

(i) The discharge of any fluids from a concrete storage structure is prohibited. All fluids shall be managed for disposal as required by 312 IAC 29-30-2.

(j) Unless the top of a concrete storage structure is completely covered with a concrete cover or other secure covering, security fencing shall be installed around each concrete production fluid storage structure to prevent unauthorized access.

(k) Each concrete storage structure shall have a legible sign posted in a conspicuous place on or near the structure. The sign shall be a size and shape that is easily read from a distance of twenty (20) feet showing the following information:

(1) The owner or operator name.
(2) The name of the lease or production unit.
(3) The registration number for the structure assigned by the division.
(4) An emergency telephone number.

(l) Concrete production fluid storage structures which are not constructed, operated, or maintained in accordance with this article shall be taken out of service and abandoned according to the requirements of 312 IAC 29-24-19.

312 IAC 29-25-16 Abandonment of concrete production fluid storage structures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 16. (a) Abandonment of concrete production fluid storage structures shall be conducted according to the requirements of this section.

(b) Prior to abandonment, oil and gas waste materials shall be removed from the structure and disposed in accordance with 312 IAC 29-30-2.

(c) Prior to removal of any of the concrete structure, the owner or operator shall notify the oil and gas inspector at least forty eight (48) hours in advance of the scheduled demolition operations. The oil and gas inspector shall inspect the structure before any backfilling operations commence.

(d) If the bottom of the concrete structure is equal to or less than three (3) feet below the ground surface, the entire structure shall be demolished and removed.

(e) If the bottom of the concrete structure is greater than three (3) feet below the ground surface,
(1) the concrete sides of the structure and any other portions of the structure which are within three (3) feet of the ground surface shall be demolished down to a depth of at least three (3) feet below the ground surface;
(2) the bottom of the concrete structure shall be perforated at sufficient intervals to prevent the accumulation of water following backfilling and grading operations; and
(3) the concrete rubble removed under this subsection may be buried within the remainder of the concrete structure provided all concrete rubble is buried at least three (3) feet below the ground surface.

(f) Except as provided in subsection (e)(3), concrete rubble removed from the structure shall be managed or disposed by any of the following methods:
(1) Burial at any location provided written authorization is obtained from the landowner and the materials are buried at least three (3) feet below the ground surface.
(2) Use as fill material or other beneficial use at any location provided written authorization is obtained from the owner of the site and the landowner acknowledges receipt of the concrete rubble for use as fill material or other beneficial use.
(3) Crushed and recycled for reuse as aggregate in new concrete construction.
(4) Disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management and which is authorized to accept this type of waste.

(g) Contaminated soil encountered during demolition operations shall be removed and managed according to the requirements of 312 IAC 29-24-7 or 312 IAC 29-24-8.

(h) The owner or operator may be required by the division to conduct further investigations or to perform additional remedial operations to correct adverse environmental impacts which may have resulted from the operation of a concrete production fluid storage structure.

(i) After removal of the concrete rubble and contaminated soil under this section, the excavation shall be backfilled with native soil materials sufficient to ensure that the site is stable and will allow for settling with the surface restored as close as possible to the original land contour. Nothing in this subsection shall prevent the construction of a pond or other impoundment on the site of the former concrete structure if the pond or impoundment is authorized by the landowner and the structure has in all other aspects been abandoned under the requirements of this section.

(j) Upon conclusion of abandonment operations, the owner or operator shall submit a report of structure abandonment to the division. The report shall be on a form prescribed by the division which shall include details of the procedures used to close the structure in accordance with the requirements of this section.

312 IAC 29-25-17 Registration of existing production fluid storage pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 17. (a) Within one hundred twenty (120) days of the effective date of this article, and owner or operator of an existing production fluid storage pit shall register the structure with the division.

(b) The division shall prescribe the form and other information to accompany the report of registration of a production fluid storage pit that shall include the following:
(1) Name and address of the pit owner.
(2) Name of lease or production unit for the pit.
(3) The location of the production fluid storage pit by quarter, quarter section, township, range and county.
(4) A map showing the location of the pit and that indicates the distance and direction from the pit to the nearest public road intersection or other prominent landmark.
(5) A plan view or sketch of the production fluid storage pit depicting the length, width, height and maximum design capacity of the pit.
(6) The age of the production fluid storage pit, if known, or the date the pit was first used by the current owner or operator.
(7) The type and age of the synthetic liner installed in the production fluid storage pit, if any.

(c) The division will assign a registration number for each production fluid storage pit and acknowledge receipt of the report of registration by furnishing a registration number to the facility owner.

(d) All production fluid storage pit registrations shall be transferred at the time of associated well transfers.

(e) If an existing production fluid storage pit will be reconstructed to meet the requirements of section 18, the owner or operator shall submit a plan for the structure modification within one-hundred twenty (120) days of the effective date of this article to the division according to the requirements for new storage pits in subsection (b).

312 IAC 29-25-18 Registration and approval of new production fluid storage pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 18. (a) An owner or operator shall submit a plan for the construction and operation of a new production fluid storage pit for approval by the division. A new pit shall not be constructed until a determination is made that the plan meets the requirements of this section and the division has issued a registration number to the pit.

(b) The division shall prescribe the form and other information to accompany the production fluid storage pit plan that shall include the following:
(1) Name and address of the owner of the pit.
(2) Name of lease or production unit for the pit.
(3) The location of the pit by quarter, quarter section, township, range and county.
(4) A map showing the pit and indicates the distance and direction from the pit to the nearest public road intersection or other prominent landmark.
(5) A plan view or sketch depicting the length, width, height and maximum design capacity of the structure.
(6) A description of the synthetic liner that will be installed meeting the requirements of section 19(c).
(7) A plan view of the subsurface drainage and monitoring system to be installed beneath the pit to meet the requirements of 312 IAC 29-24-22(d).
(8) A demonstration that the pit meets the location requirements of subsection 19(b).
(9) Where any portion of the proposed pit will involve excavation, fill, or the construction or erection of structures within the one-hundred (100) year floodplain of any river or stream , the plan shall include the following:

(A) A demonstration that the top of the pit will be at least two (2) feet above the one-hundred (100) year flood elevation; and
(B) one (1) of the following:
(i) written confirmation from the division of water that a permit is not required under IC 14-28-1; or
(ii) an application for construction within a floodway under IC 14-28-1.

312 IAC 29-25-19 Location, construction, and operating requirements for production fluid storage pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 19. (a) The use of production fluid storage pits which have not been constructed or modified to meet the requirements of this section is prohibited. Within one hundred eighty (180) days after the effective date of this article, existing production fluid storage pits not meeting the requirements of this section shall be taken out of service and abandoned according to the requirements of section 20 unless:
(1) a plan for modification of the pit has been filed with the division in accordance with section 17(e); and,
(2) the plan has not yet been approved by the division.

(b) New production fluid storage pits shall not be located:
(1) within two hundred (200) feet of an occupied dwelling, unless written consent is obtained from the owner of the dwelling consenting to the construction and operation of the pit closer than two hundred (200) feet;
(2) within two hundred (200) feet of a domestic water well or one thousand (1,000) feet of a public water supply well;
(3) within two hundred (200) feet of a stream, lake, pond or other body of water unless the operator demonstrates that construction standards or topography will prevent any discharge from the pit; or
(4) within the one-hundred (100) year floodplain of any river or stream unless the top of the pit will be at least two (2) feet above the one-hundred (100) year flood elevation, and
(A) a permit is obtained for construction within a floodway under IC 14-28-1; or
(B) written confirmation is received from the division of water stating that a permit is not required under IC 14-28-1.

(c) Production fluid storage pits shall be constructed utilizing standard industry practices and lined with a synthetic liner that is compatible with the produced fluid and which is at least thirty (30) mils in thickness, with a four (4) inch welded seam overlap where the use of a continuous liner is not practical. The liner shall be installed to completely cover the pit bottom and side walls.

(d) The synthetic liner of each production fluid storage pit shall be underlain by a drainage system constructed and operated to detect any discharge or release of fluids from the sides or bottom of the pit. The drainage system shall be constructed to allow the monitoring and sampling of fluids present under the pit.

(e) The division director may require the owner or operator of a production fluid storage pit submit as built plans which demonstrate that the pit has been constructed to meet the requirements of this section.

(f) Fluids accumulating in a drainage system constructed beneath any production fluid storage pit shall be sampled quarterly by the owner of the pit and analyzed for chlorides and total dissolved solids by an independent laboratory. A copy of the results of the sampling and analysis shall be maintained at the facility offices for review by the division upon request. Unless other parameters are authorized by the division director, if:
(1) the chlorides are greater than five-hundred milligrams per liter (500 mg/l); or,
(2) total dissolved solids are greater than seven-hundred fifty milligrams per liter (750 mg/l);
the division shall be notified within five (5) days.

(g) Production fluid storage pits shall be maintained with at least two (2) feet of freeboard from the top of the pit to prevent the accidental discharge of wastes or fluids from the pit.

(h) The discharge of any fluids from a production fluid storage pit is prohibited. All fluids shall be managed for disposal as required by 312 IAC 29-30-2.

(i) Puncturing or perforating the synthetic liner is prohibited.

\ (j) Upon receipt of sampling data from the underlying drainage system under subsection (f), showing elevated chloride or total dissolved solids levels, the owner or operator shall:

(1) notify the division inspector at least five (5) days in advance of performing an inspection so that the inspector may be present to witness the inspection.

(2) drain the pit of all contents and conduct an inspection to determine the integrity of the liner.

(3) repair any cracks, holes or other visible indications of a loss of liner integrity or replace the damaged sections of the liner according to the specifications of the liner manufacturer before returning the pit to service.

(4) submit a report showing the results of the inspection and any remedial repairs or liner replacement to the division within thirty (30) days following the inspection and performing any liner repair or replacement operations.

(k) Security fencing shall be installed around each production fluid storage pit to prevent unauthorized access.

(l) Each production fluid storage pit shall have a legible sign posted in a conspicuous place on or near the pit. The sign shall be a size and shape that is easily read from a distance of twenty (20) feet showing the following information:

(1) The owner or operator name.

(2) The name of the lease or production unit.

(3) The registration number for the pit assigned by the division.

(4) An emergency telephone number.

(m) Production fluid storage pits which are not constructed, operated, or maintained in accordance with this article shall be taken out of service and abandoned according to the requirements of section 20.

312 IAC 29-25-20 Abandonment of production fluid storage pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 20. (a) Abandonment of production fluid storage pits shall be conducted according to the requirements of this section.

(b) Prior to abandonment, all oil and gas waste materials shall be removed from the pit and disposed of according to the requirements of 312 IAC 29-30-2.

(c) The synthetic liner shall be removed and disposed of at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste.

(d) Prior to backfilling any portion of the pit, the owner or operator shall notify the oil and gas inspector at least forty eight (48) hours in advance of the scheduled backfilling operations. The oil and gas inspector shall inspect the pit before any backfilling operations commence.

(e) Contaminated soil encountered during pit closure operations shall be removed and managed according to the requirements of 312 IAC 29-24-7.

(f) The owner or operator may be required to conduct further investigations or to perform additional remedial operations to correct adverse environmental impacts which may have resulted from the operation of a production fluid storage pit.

(g) After removal of the pit contents, liner and contaminated soil under this section, the excavation shall be backfilled with native soil materials sufficient to ensure that the site is stable and which will allow for settling with the surface restored as close as possible to the original land contour. Nothing in this subsection shall prevent the construction of a pond or other impoundment on the site of the former production fluid storage pit if the pond or impoundment is authorized by the landowner and the structure has in all other aspects been abandoned under the requirements of this section.

(h) Upon conclusion of abandonment operations, the owner or operator shall submit a report of pit abandonment to the division. The report shall be on a form prescribed by the division which shall include details of the procedures used to close the pit in accordance with the requirements of this section.

312 IAC 29-25-21 Production wells with uncirculated production casing
Authority: IC 14-10-2-4; IC 14-37-3

Affected: IC 14-37

Sec. 21. (a) This section applies to all oil and gas production wells completed without a circulated production casing.

(b) The owner or operator shall maintain fluid levels in production wells completed without circulated production casing at least one-hundred feet below the depth of the lowermost underground source of drinking water.

(c) Fluid levels within one-hundred (100) feet of the elevation of the lowermost underground source of drinking water are considered to pose a risk of contamination to the underground source of drinking water unless the operator can demonstrate one or more of the following:

(1) Based on fluid analysis or annual monitoring of fluid levels, the well does not pose a threat to ground water quality; or

(2) An internal mechanical integrity test is performed at least once every five (5) years on the production casing to demonstrate that the casing is adequate to isolate well fluids from the underground source of drinking water.

(d) The owner or operator of any well that poses a risk of contamination to an underground source of drinking water as a result of high fluid levels shall promptly:

(1) repair or replace the affected casing;

(2) take other measures to ensure protection of the underground source of drinking water; or,

(3) plug and abandon the well.

(e) If an owner or operator is unable to pump down a well within normal pumping intervals for that well, or observes other conditions suggesting a hole exists in the production casing the owner or operator shall:

(1) notify the division within forty eight (48) hours of the discovery; and,

(2) monitor fluid levels in the well as required by the division to determine whether the well poses a risk of contamination to underground sources of drinking water.

(f) The division may require an owner or operator of a production well with uncirculated casing that has been inactive for a period of at least sixty (60) days to monitor fluid levels to determine whether the well poses a risk of contamination to underground sources of drinking water.

(g) Where the division determines that coal seams, oil or gas formations, or any water bearing formations existing behind the production casing are not protected with cement, and there is evidence that a buildup of pressure may be occurring in the production casing and surface casing annulus, the owner or operator may be required to:

(1) configure the well the include a one quarter inch (¼") female fitting, with shut-off valve, to allow monitoring of the annular pressure between the production casing and the surface casing; or,

(2) install a vent to the surface from the annulus to prevent the buildup of pressure.

312 IAC 29-25-22 Open burning of solid or liquid waste
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 22. The owner or operator shall not engage in open burning of oil and gas waste material of any kind unless authorized all applicable local, state and federal laws.

312 IAC 29-25-23 Protection of waterfowl and flying mammals
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 23. The owner or operator shall cover the following structures with netting or other protective material designed to keep birds and flying mammals from entering the structure and coming into contact with production fluids:

(1) concrete production fluid storage structures which are not completely covered with a concrete cover or other solid covering;

(2) production fluid storage pits; and

(3) open top tanks used for the storage of produced fluids or liquid oilfield wastes.

Rule 26. Petroleum production reporting

312 IAC 29-26-1 Requirement to report monthly production annually
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) Effective January 1, 2018, an owner or operator of oil, natural gas, and coal bed methane production wells shall record monthly oil, natural gas, and coal bed methane production sales volumes for each individual lease or production unit.

(b) An owner or operator shall submit a report of monthly production sales volumes by March 1 of each year beginning March 1, 2019 for all production sales volumes from the previous calendar year.

312 IAC 29-26-2 Required information
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) Oil production sales volumes shall be reported using the volume of oil as measured at the time of sale following custody transfer and from which the division of interest is calculated.

(b) Natural gas and coal bed methane production sales volumes shall be reported using the volume of gas measured at the time of sale following custody transfer from which the division of interest is calculated using a pressure base of 14.73 psia at 60 degrees Fahrenheit.

(c) The production report shall include the following:
(1) Operator name;
(2) Lease, farm name, or production unit;
(3) Production month and year;
(4) Purchaser number or lease number assigned by the oil and gas purchaser to the lease or the well for accounting and production payment purposes;
(5) County of production;
(6) Pool or field name; and,
(7) Section, township, and range.

312 IAC 29-26-3 Sale or transfer of wells; obligation to report
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. An owner or operator who sells or transfers a well shall be responsible for submitting the report under this rule for the portion of the reporting period before the effective date of the transfer of the permit to another owner or operator. The new owner or operator shall be responsible for submitting the report under this rule for the portion of the reporting period after the effective date of the transfer of the permit to the new owner.

Rule 27. Operation of wells in hydrogen sulfide (H_2S) areas

312 IAC 29-27-1 General requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) For purposes of this rule an "area of hydrogen sulfide (H_2S)" is an area with a minimum concentration of one hundred parts per million (100 ppm) or more in ambient atmosphere as determined by the division. The concentration of hydrogen sulfide (H_2S) in the ambient atmosphere shall be ascertained by the owner or operator at the owner's or operator's expense:
(1) upon the request of the division; or
(2) when the owner or operator determines that hydrogen sulfide (H_2S) may be present.

(b) The results of testing under subsection (a) shall be reported to the division within ten (10) days of receipt of the test results.

(c) The owner or operator of a well or facility associated with the drilling, operation or plugging of a well for oil and gas purposes in an area of hydrogen sulfide (H_2S) shall provide safeguards to protect the general public from the harmful effects of hydrogen sulfide (H_2S) in accordance with this section.

(b) When a well or facility associated with the drilling, operation or plugging of a well for oil and gas purposes is located in an area of hydrogen sulfide (H_2S), the owner or operator shall install wind direction indicators at strategic locations on or near a drilling rig, workover rig or plugging rig, and at all production facilities, to indicate the wind direction at all times and the safe upwind areas in the event hydrogen sulfide (H_2S) becomes present.

312 IAC 29-27-2 Storage tank requirements in hydrogen sulfide (H_2S) areas
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) Storage tanks operated as a part of a production operation at or near atmospheric pressure creating an area of hydrogen sulfide (H_2S) three (3) feet downwind of an open hatch or atmospheric vent, shall be subject to the following:
(1) The owner or operator shall keep all tank hatches closed at all times except when necessary to inspect or to gauge such tanks.~~.~~
(2) The owner or operator shall prevent entry to the storage tank facility by unauthorized persons. At a minimum, the following security measures shall be used:
(A) security fencing is required when storage tanks are located in an incorporated city or town or within one thousand (1,000) feet of any of the following:
(i) occupied dwellings;
(ii) commercial buildings;
(iii) places of business;
(iv) schools;
(v) churches;
(vi) government buildings; or,
(vii) public parks.
(B) For areas not specified in subdivision (b)(1), by security fencing or by locking the hatches on all such tanks when not being inspected or gauged.

(b) Hydrogen sulfide (H_2S) fumes and vapors from atmospheric vents on storage tanks and separators shall be minimized by one or more of the following measures:
(1) a vapor recovery unit;
(2) combustion of tank vapors through a combustion device with a permanent reliable ignition system attached thereon;
(3) installation and maintenance of suitable carbon filtration devices; or
(4) other means approved by the division.

(c) Upon request of the division director, the owner or operator shall conduct atmospheric monitoring at the perimeter of the storage tank facility from a point downwind of the tanks to measure hydrogen sulfide (H_2S) concentrations during crude oil loading operations or when the wells are actively flowing produced fluids into the storage tanks.

312 IAC 29-27-3 Warning signs
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) The owner or operator shall place warning signs alerting persons to the presence of hydrogen sulfide (H_2S) at:
(1) the entrance of each access road leading to the facility; and
(2) within fifty (50) feet of the tanks at each facility.

(b) The signs shall be readable from a distance of twenty (20) feet and contain the following information:

(1) the name of owner or operator;
(2) emergency contact information;
(3) the words "Danger – Poisonous Gas – Hydrogen Sulfide".

312 IAC 29-27-4 Notification to local governments
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) On March 31st of each calendar year, an owner or operator of production facilities in areas of hydrogen sulfide (H2S) shall provide notification of the existence of the well or facility associated with the drilling, operation or plugging of a well for oil and gas purposes to the following:
(1) The county health department for each county that is located within five (5) miles of the facility.
(2) The fire department closest to the well or facility associated with the drilling, operation or plugging of a well for oil and gas purposes.
(3) The chief executive for each incorporated town or city located within five (5) miles of the well or facility associated with the drilling, operation or plugging of a well for oil and gas purposes.

(b) The notice required by this section shall include the following information:
(1) The name and 24-hour contact information for the owner or operator.
(2) A map showing the location of each storage tank facility within the area of hydrogen sulfide (H2S).
(3) Notice that the area contains hydrogen sulfide (H_2S), a poisonous gas.

Rule 28. Operating and reporting requirements for Class II UIC wells

312 IAC 29-28-1 Operating requirements for a Class II well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) An owner or operator shall obtain written authorization from the division under this rule to operate a Class II well.

(b) Written authorization to inject shall be issued after the owner or operator has submitted to the division the following:
(1) a completion report showing the well has been constructed as a Class II well in accordance with the permit issued under 312 IAC 29-5;
(2) an analysis of the injection fluid in accordance with section 7:
(3) certification that the well meets the requirements for external mechanical integrity under section 4, verified by either of the following:
(A) cement tickets; or,
(B) other measures specified in subsections 4(c)(1) through (6).
(4) certification that the well has passed an internal mechanical integrity test in accordance with section 2.

(c) The division director may require additional testing or special equipment if appropriate to the protection of an underground source of drinking water.

312 IAC 29-28-2 Establishment of internal mechanical integrity for Class II wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) Establishment of internal mechanical integrity includes:
(1) proper placement of the packer in accordance with subsection (b) or (c); and
(2) successful performance of a pressure test in accordance with subsection (f)

(b) Injection shall be through tubing and packer unless alternative construction methods are approved by the division. The packer shall be placed no higher than two hundred (200) feet above the uppermost perforations or the casing seat in an open hole completion, provided the packer is:

(1) within the cemented portion of the production casing such that there is at least fifty (50) feet of cement above the packer; and,
(2) no less than one hundred (100) feet below the base of the freshwater.
No perforations shall be left open above the packer unless they are isolated by a dual packer or concentric packer system. If a dual packer is used, the uppermost packer must satisfy the placement requirements of this subsection.

(c) The permittee shall contact the division at least twenty four (24) hours prior to the initial setting or any resetting of the packer in a Class II UIC well to enable an oil and gas inspector to be present when the packer is set.

(d) The owner or operator shall establish internal mechanical integrity:
(1) before initial injection into a newly permitted Class II well;
(2) before initial injection into a Class II well after any workover of the well involving the resetting or movement of a packer;
(3) before resuming injection into any Class II well after a change to a new, permitted injection zone;
(4) before initial injection into a Class II well after the well has been reactivated from temporary abandonment status;
(5) whenever the division has reason to believe, based upon well records or field observation, that the well may be leaking or was improperly constructed;
(6) at least once every five (5) years measured from the date mechanical integrity was last established unless the well has been temporarily abandoned in accordance with 312 IAC 29-31-3; and,
(7) before resuming the injection of fluids after repairs are made following failure of the well to pass a pressure test.

(e) The owner or operator shall comply with the following requirements for conducting pressure tests to establish internal mechanical integrity of a Class II well:
(1) Notice shall be given to the division at least twenty four (24) hours before conducting a pressure test.
(2) The setting depth of the packer and the results of the pressure test shall be verified by a representative of the operator and reported to the division on a form prescribed by the division.
(3) The casing-tubing annulus above the packer shall be filled with fluid and the pressure tested under the supervision of the division.
(4) Except as provided under section 3 of this rule, the fluid used to fill the casing-tubing annulus shall be a liquid.
(5) The test pressure shall be a minimum of three-hundred pounds per square inch (300 PSI) with a pressure differential between the tubing and the annulus of fifty pounds per square inch (50 PSI).
(6) The test pressure shall be maintained with a pressure differential of no more than a three percent (3%) over a period of thirty (30) minutes.
(7) The well may be operating or shut in during the test.

312 IAC 29-28-3 Use of nitrogen for internal mechanical integrity testing
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. An owner or operator may use nitrogen to assist with pressurizing the casing-tubing annulus to the required test pressure provided a demonstration is made that the packer is set inside cemented casing at a point within two hundred (200) feet above the uppermost perforations or the top of the uppermost injection zone in open hole completions in accordance with 312 IAC 29-27-2(b). The demonstration shall consist of either:
(1) a wireline or other reliable measurement to confirm the packer setting depth; or
(2) an affidavit of the current well owner or operator who set the packer that the packer is set at the depth reflected on the current completion or recompletion report for the well.

312 IAC 29-28-4 Establishment of external mechanical integrity for Class II wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) In conjunction with the establishment of internal mechanical integrity for Class II UIC wells, the external mechanical integrity shall be evaluated by the division to establish that underground sources of drinking water are protected from upward migration of injection fluids.

(b) To establish external mechanical integrity, all Class II wells shall be constructed in accordance with 312 IAC 29-19-7 through 312 IAC 29-19-9.

(c) If external mechanical integrity of a Class II well drilled in accordance with 312 IAC 29-19-7 through 312 IAC 29-19-9 cannot be demonstrated by cement records, the owner or operator may establish external mechanical integrity through one or more of the following methods:

(1) a temperature or noise log indicating top of cement;
(2) a cement bond log showing gamma ray, transit time, collar locator and variable density log;
(3) advanced cement evaluation logs;
(4) radioactive tracer survey indicating lack of fluid migration behind the casing;
(5) oxygen-activation log indicating lack of fluid migration behind the casing;
(6) another method authorized by the division upon a demonstration by the owner or operator that the test applies methods and standards generally accepted in the petroleum industry that have been found reliable for demonstrating external mechanical integrity.

312 IAC 29-28-5 Monitoring and reporting requirements for Class II wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) The owner or operator shall monitor and record:
(1) maximum injection pressure;
(2) average injection pressure; and,
(3) the injection volume
for a Class II well on a weekly basis.

(b) The owner or operator shall summarize the data collected under subdivision (a) on a monthly basis.

(c) The owner or operator shall file with the division a quarterly report containing the information specified in subsections (a) and (b) on a form prescribed by the division within thirty (30) days after the end of the quarter being reported.

(d) The owner or operator shall use the same form to indicate casing annulus pressure monitoring used instead of any other casing annulus pressure test performed.

312 IAC 29-28-6 Well head fittings and valves to allow monitoring of injection and annular pressures
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. The owner or operator shall install on a Class II well:
(1) a wellhead configured to include a one quarter inch (¼") female fitting with shut-off valve to allow monitoring of the annulus between the production casing and the injection tubing; and,
(2) a one quarter inch (¼") female fitting with shut-off valve on the tubing to measure the injection pressure.

312 IAC 29-28-7 Analysis of Class II fluids
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. In addition to the injection fluid analysis required under section 1, an owner or operator shall submit a standard laboratory analysis of a representative sample of the fluid being injected into the Class II well as follows:
(1) when a change in source or nature of the injection fluid occurs; or,
(2) upon request by the division.

312 IAC 29-28-8 File review and update of Class II well permits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. (a) At any time the division may perform a file review of a Class II well to determine whether continued operation of the well meets the requirements of IC 14-37 and this article.

(b) When conducted the review may consider the following:
(1) The current injection intervals.
(2) Maximum injection pressures and rates.
(3) Compliance with well construction requirements for Class II wells including internal and external mechanical integrity of the Class II well.
(4) A survey of all wells within the area of review which penetrate the injection zone to consider whether these wells may
(A) be adversely affected by the operation of the Class II well; and,
(B) have the potential to cause or contribute to the migration of injection fluids into underground sources of drinking water due to inadequate construction or plugging.

(c) If the division determines a well has the potential to serve as a conduit for the migration of fluid into underground sources of drinking water a corrective action plan will be established under this section.

(d) The division shall notify the owner or operator of the Class II well and request a corrective action plan that will prevent fluid movement:
(1) into an underground source of drinking water;
(2) to the surface; or,
(3) into an unpermitted zone.

(e) Within thirty (30) days after receiving notice from the division the owner or operator of the Class II well shall submit a proposed corrective action plan to prevent the movement of fluid into an underground source of drinking water that considers the following:
(1) The nature and volume of injected fluid.
(2) The nature of native fluids or byproducts of injection.
(3) Potentially affected persons.
(4) Geology.
(5) Hydrology.
(6) History of the injection operation.
(7) Completion and plugging records.
(8) Abandonment procedures in effect when the well was abandoned.
(9) Hydraulic connections with an underground source of drinking water.

(f) The division shall evaluate the proposed corrective action plan to determine whether modifications are necessary

(g) The division director may require additional testing or special equipment to protect an underground source of drinking water.

(h) The division director shall establish a final corrective action plan to ensure protection of underground sources of drinking water and prevention of fluid movement to the surface or into an unpermitted zone that shall become a condition to the permit to operate the Class II well.

(i) The final corrective action plan established under subsection (h) becomes effective within thirty (30) days of issuance unless a person requests administrative review under IC 4-21.5.

312 IAC 29-28-9 Plugging of leaking wells within area of review
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. (a) If the division has reason to believe that injection fluids are migrating into an underground source of drinking water or leaking to the surface or into an unpermitted zone through an unpermitted or previously unknown well or drill hole located within the area of review of a Class II well, the well shall be plugged by the owner or operator unless the owner or operator demonstrates that the migrating fluids are not the result of the operation of the Class II well. The owner or operator

may be ordered by the division to shut in the Class II well until all necessary corrective actions required by this section are completed to prevent the migration of injection fluids.

(b) An unpermitted or previously unknown well or drill hole that cannot be shown to have been constructed or plugged in a manner sufficient to protect the migration of fluids into an underground source of drinking water or to the surface or into an unpermitted zone shall be plugged by the current permittee of the Class II well.

(c) If the division has reason to believe a well previously plugged in accordance with IC 14-37 located within the area of review of a Class II well is causing injection fluids to migrate into an underground source of drinking water or is leaking to the surface or into an unpermitted zone, the previously plugged well shall be replugged within sixty (60) days or an alternative time frame approved by the division director by:

(1) the previous permittee at the time the previously plugged well was plugged; if known or

(2) the owner or operator of the Class II well, if the previous permittee does not replug the well.

(d) The owner or operator of the Class II well shall be entitled to establish that the fluid leaking into the underground source of drinking water or to the surface is not the result of operating the Class II well.

(e) Any violation of this section may result in the issuance of an order requiring the owner or operator to plug the Class II well.

(f) The owner or operator shall notify the division orally within twenty-four (24) hours of any failure or irregularity indicating that fluid is leaking into:
(1) an underground source of drinking water;
(2) to the surface; or,
(3) into an unpermitted zone.
The owner or operator shall provide written notice of the failure or irregularity to the division within five (5) days of the occurrence and shall comply with section 8 of this rule.

Rule 29. Operating and reporting requirement for underground gas storage facilities.

(Reserved)

Rule 30. Operating and reporting requirement for underground petroleum storage facilities.

(Reserved)

Rule 31. Management of wastes and on-site remediation

312 IAC 29-31-1 Purpose and scope of this rule
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) The purpose of this rule is to establish requirements for the management, treatment, and disposal of wastes associated with the operation of wells for oil and gas purposes under IC 14-37 other than those wastes covered under 312 IAC 29-21 for drilling and completion wastes, 312 IAC 29-22 for well stimulation wastes, 312 IAC 29-23 for well workover wastes, or 312 IAC 29-31 for NORM wastes.

(b) It is the responsibility of the owner or operator to ensure that all wastes resulting from an activity or process used in connection with the operation of wells for oil and gas purposes under IC 14-37 and this article are managed and disposed in accordance with applicable federal, state and local waste management laws and regulations, including wastes not specifically identified in this article.

312 IAC 29-31-2 Management, treatment, and disposal options for commonly encountered oil and gas waste materials
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) This section establishes requirements for the management, treatment and disposal of commonly encountered oil and gas waste materials.

(b) An owner's or operator's use of disposal methods other than those specified in this section, shall be considered a violation of this article subject to enforcement action, unless:
(1) prior written authorization is received from the division director after consultation with the department of environmental management, or,
(2) the owner or operator demonstrates that the disposal method is permissible under local, state and federal waste management laws and regulations.

(c) Except as otherwise required in this article, oil and gas waste materials:
(1) shall be stored in aboveground tanks, vessels, or other containers that are leak-free and suitable for the storage and containment of the waste material.
(2) of different types shall not be mixed or comingled except as expressly authorized in this article or as allowed under local, state or federal waste management laws and regulations.
(3) shall be covered or otherwise protected from exposure to precipitation or surface water runoff.
(4) may only be stored temporarily until arrangements can be made for reuse, recycling, or proper disposal.

(d) Produced water, including produced water recovered during spill response operations and well blowdown fluids, shall be managed and disposed of by any of the following methods:
(1) Recycled into existing produced water storage tanks.
(2) Underground injection into a permitted Class II well.
(3) Treated at a facility authorized to accept this type of waste by the department of environmental management.

(e) Crude oil, including crude oil recovered during spill response operations and hydrocarbons skimmed from drilling, completion, production, workover or plugging pits shall be managed and disposed of by the following methods:
(1) Recycled into existing crude oil storage tanks.
(2) Underground injection into a permitted Class II well.
(3) Application to lease road or county road for dust suppression in accordance with 312 IAC 29-24-6.
(4) Treatment at a permitted waste oil recovery facility authorized to accept this type of waste.
(5) Disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste.

(f) Crude oil tank bottoms, bottom sediments, and paraffin shall be managed and disposed of by the following methods:
(1) Underground injection into a permitted Class II disposal well.
(2) Application to lease road or county road for dust suppression in accordance with 312 IAC 29-24-6.
(3) Treatment at a permitted waste oil recovery facility authorized to accept this type of waste.
(4) Disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste.

(g) Storm water that accumulates inside crude oil storage and production tank batteries shall be managed in accordance with the requirements of 312 IAC 29-24-3 (c)(6) and disposed of by the following methods:
(1) Recycled into existing produced water storage tanks.
(2) Underground injection into a permitted Class II well.
(3) Where authorized under 312 IAC 29-24-3(d)(1) through (3), discharged in accordance with the requirements of 312 IAC 29-24-3(d)(4).
(4) Treatment at a facility authorized to accept this type of waste by the department of environmental management.

(h) Water resulting from hydrostatic testing of casing, tubing, flowlines or other pipelines shall be managed and disposed of by the following methods:
(1) Recycled into existing produced water storage tanks.
(2) Recycled or reused at another well site or testing site.

(3) Underground injection into a permitted Class II well.
(4) Land application if the fluid meets the following criteria:
(A) Chloride shall be less than one-thousand milligrams per liter (1,000 mg/l).
(B) Total dissolved solids shall be less than one-thousand five-hundred milligrams per liter (1,500 mg/l).
(C) pH shall be greater than 6.5 and less than 9.0.
(D) No visible sheen shall be present on the fluids prior to land application.

(i) The following types of oil and gas waste materials shall be managed and disposed of at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste:
(1) Spent filters or filter media resulting from treatment of produced water.
(2) Used absorbent pads and absorbent materials

(j) The following types of oil and gas waste materials shall be managed and disposed of in accordance with subsection (h) or be reclaimed or recycled for reuse:
(1) Iron sponge, molecular sieve and other solids resulting from gas treatment operations.
(2) Spent amine, glycol and other gas treatment fluids.
(3) Spent charcoal or other solids used in conjunction with vapor recovery or vapor control processes.
(4) Used solvents, motor oil, gear oil, lubricants, compressor oil, and hydraulic oil.
(5) Unused treatment chemicals or products used in drilling, completion, workover, or plugging operations
(6) After being cleaned of any residual product, unused drums, totes, and other containers.

(k) Tanks, process or treatment vessels, casing, tubing, rods, wellheads, valves, flowlines, pumps, pumping units, cables, tools and all other metallic equipment that are unusable, unserviceable, or otherwise considered to be oil and gas waste material shall be managed and disposed of by any of the following methods:
(1) After being cleaned to remove residual soil or other contamination, transportation to metal recycling facility.
(2) Disposal at a solid waste landfill or other waste management facility permitted by the department of environmental management to accept this type of waste.

Rule 32. Management of naturally occurring radioactive material (NORM)

312 IAC 29-32-1 Identification of NORM contaminated equipment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. (a) For purposes of this rule "production facilities considered at risk for containing NORM contamination" means the following:
(1) New Albany Shale gas production operations;
(2) enhanced recovery oil production operations;
(3) any production facility where used equipment from any of the above operations has been stored; and,
(4) any production facility determined by the division to contain NORM contamination based on radiation survey instrument measurements.

(b) An owner or operator of production facilities at risk for containing NORM contamination shall be responsible for determining whether NORM-contaminated equipment is present at any of their production operations as follows:
(1) radiation survey instruments used shall be:
(A) tested and calibrated using methods and at intervals recommended by the equipment manufacturer; and
(B) capable of detecting and measuring radiation exposure levels from 1 µR/hr through at least 500 µR/hr.
(2) measurements shall be performed by an operator knowledgeable of and properly trained in the use and operation of the radiation survey instrument.

(c) Upon request by the division, the owner or operator shall provide evidence that:
(1) the radiation survey instrument was properly tested and calibrated: and
(2) the measurement was performed by an operator with knowledge and training in the use of the radiation survey instrument.

(d) Upon a determination that NORM-contaminated equipment is present the owner or operator shall provide written notice to the division within thirty (30) days that includes:
(1) the name and location of the facility; and,
(2) a description of the equipment identified as NORM-contaminated.

312 IAC 29-32-2 Management and disposal plan for NORM-contaminated equipment
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An owner or operator of a facility found to contain NORM contaminated equipment shall prepare a plan for the identification and management of NORM-contaminated equipment that identifies the procedures for:
(1) calibrating radiation survey instruments according to the requirements of the equipment manufacturer;
(2) training users in the proper use of the radiation survey instruments; and
(3) inventorying and tracking the location of each piece of NORM-contaminated equipment at the facility.
The plan shall be made available for inspection and copying by the division during reasonable business hours.

(b) An inventory shall identify for each item of NORM-contaminated equipment:
(1) the radiation exposure levels recorded;
(2) the date the levels were measured;
(3) whether the NORM-contaminated equipment is currently:
(A) in use; or,
(B) located in a designated NORM-contaminated equipment storage area awaiting treatment or disposal.

(c) For each item of NORM-contaminated equipment that has been removed from the facility for treatment or disposal the owner or operator shall maintain records of the following:
(1) the date the equipment was removed from the facility;
(2) the identity and the location of the entity treating or disposing of the equipment; and
(3) the method used for disposal of the NORM-contaminated equipment or oil and gas NORM waste removed from the equipment by treatment operations

(d) The owner or operator shall review and update the inventory no less frequently than every ninety (90) days as long as NORM-contaminated equipment is present at the facility.

312 IAC 29-32-3 Prohibited disposal
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) An owner or operator shall not dispose of oil and gas NORM waste or NORM-contaminated equipment except as provided in this rule.

312 IAC 29-32-4 Authorized disposal methods
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) This section authorizes the methods for disposing of NORM waste or NORM-contaminated equipment without prior authorization from the division, provided written notice is given to the division at least forty-eight (48) hours prior to commencing the disposal operation. The notice shall indicate the method proposed for the disposal of the NORM waste and NORM contaminated equipment.

(b) An owner or operator may dispose of oil and gas NORM waste and NORM contaminated equipment by placing it between plugs in a well that is being plugged and abandoned, provided:
(1) The surface owner of the lease or unit where the disposal occurs provides written consent for the disposal.
(2) The oil and gas NORM waste or NORM-contaminated equipment is placed in the well at a depth of at least two hundred fifty (250) feet below the base of the lowermost underground source of drinking water.
(3) If the oil and gas NORM waste or NORM-contaminated equipment is encased in a tubing string, or if the NORM-contaminated equipment is a tubing string, the tubing must:

(A) be placed, not dropped, in the well; and

(B) be equipped with an assembly that allows for retrieval unless the string is secured in cement.

(4) A cement plug shall be set immediately above the oil and gas NORM waste or NORM-contaminated equipment and the plug shall be either:

(A) above a cement retainer;

(B) above a cast iron bridge plug; or

(C) tagged to locate its position.

(5) The cement of the surface plug shall be color dyed with red iron oxide.

(6) A permanent marker depicting the three-bladed radiation symbol, without regard to color, shall be welded to the steel plate at the top of the well casing.

(7) The owner or operator shall include the following information on the plan for well plugging submitted to the division under 312 IAC 29-31-5:

(A) the physical nature of the oil and gas NORM waste or NORM-contaminated equipment;

(B) the volume of oil and gas NORM waste or NORM-contaminated equipment;

(C) the radioactivity level of the oil and gas NORM waste (in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclides for soil or other media (such as pipe scale, contaminated soil, basic sediment.), or in µR/hr for NORM-contaminated equipment (such as pipes, pumps and valves);

(D) the owner or operator of the lease, unit, or facility at which oil and gas NORM waste and NORM-contaminated equipment was generated; and

(E) the source of the oil and gas NORM waste and NORM-contaminated equipment by field, lease unit, or facility; and producing formation.

(F) If the oil and gas NORM waste and NORM-contaminated equipment is to be encased in tubing, the owner or operator shall include the following information:

(i) the size, grade, weight per foot, and outside diameter of the tubing;

(ii) the subsurface depth of both the top and bottom of the tubing;

(iii) the diameter of the retrieval assembly; and

(iv) whether the tubing is free in the hole or is secured by cement, a bridge plug, or a cement retainer.

(c) Unless otherwise prohibited, an owner or operator may dispose of oil and gas NORM waste by burial at the same site where the waste was generated, provided that, the waste has been treated or processed so the radioactivity concentration does not exceed 5 pCi/g above background of Radium-226 combined with Radium-228 or 150 pCi/g above background of any other NORM radionuclide averaged over the first six (6) inches of soil below surface and does not exceed 15 pCi/g above background of Radium-226 combined with Radium-228 averaged over succeeding six (6) inch layers. Such treatment or processing, if it occurs at the disposal site, is considered to fall within the definition of disposal. This subsection does not authorize the burial of NORM-contaminated equipment.

(d) An owner or operator may dispose of oil and gas NORM waste at the same site where the waste was generated by applying it to and mixing it with the land surface, provided that after such application and mixing the radioactivity concentration in the area where the NORM waste was applied and mixed does not exceed 5 pCi/g above background of Radium-226 combined with Radium-228 or 150 pCi/g above background of any other radionuclide.

(e) An owner or operator may dispose of NORM waste at a disposal facility permitted by the department of environmental management to accept the waste or a facility in another state if the disposal facility is authorized under its license to receive and dispose of such waste.

312 IAC 29-32-5 Permit for injection into Class II well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) An owner or operator shall obtain a permit specifically authorizing the disposal of oil and gas NORM waste by injection into a Class II well before injecting the waste.

(b) The division shall issue a permit to dispose of oil and gas NORM waste in a Class II well only if the division determines that the waste will not present a hazard to:

(1) public health;

(2) safety; and,

(3) the environment.

(c) In addition to the application requirements of 312 IAC 28-5, an applicant for a permit to inject oil and gas NORM waste shall include

(1) a description of the physical nature (such as pipe scale, contaminated soil, or basic sediment) of the waste to be disposed;

(2) a statement of the total volume of oil and gas NORM waste to be disposed or the proposed rate of waste disposal;

(3) a statement of the maximum measured radioactivity level of the waste (in pCi/g of Radium-226 combined with Radium-228, and any other NORM radionuclide) that will be disposed; and

(4) any additional information required by the division to demonstrate that the proposed disposal protects:

(A) public health;

(B) safety; and,

(C) the environment.

(d) In addition to the notice requirements set forth at 312 IAC 29-5, an applicant for a permit to inject NORM waste shall include in the notice the information required in subsection (c).

312 IAC 29-32-6 Recordkeeping
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) The owner or operator of the lease, unit, or facility at which oil and gas NORM waste or NORM contaminated equipment was generated shall maintain records that include the:

(1) identity of the property where the NORM waste or NORM contaminated equipment was generated by lease, unit, or facility name; and producing formation, if known;

(2) identity of the facility, site, or well where the NORM waste or NORM contaminated equipment was disposed;

(3) physical nature of the NORM waste or NORM contaminated equipment;

(4) volume of NORM waste the person disposed of at that facility, site, or well; and

(5) radioactivity level(s) of the NORM waste, stated in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclide for soil and other media such as pipe scale, contaminated soil, basic sediment, etc., or NORM contaminated equipment stated in µR/hr for equipment.

(b)Any person who keeps plans or records required by this rule shall make those records available for examination and copying by the division during reasonable working hours.

Rule 33. Temporary abandonment of wells and well plugging requirements

312 IAC 29-33-1 Requirement to plug and abandon wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. An owner or operator must plug and abandon a well that:

(1) is determined to be a dry hole;

(2) ceases to produce oil, natural gas, or coal bed methane; or

(3) is no longer operated for the purpose for which the well is permitted;

unless the owner or operator is authorized to delay the plugging and abandonment of the well under section 3 or is granted approval to temporarily abandon the well under Section 4.

312 IAC 29-33-2 Responsibility for plugging a well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) An owner or operator of a well is responsible for plugging a well under IC 14-37, and this rule.

(b) A person who is not the owner or operator of a well who intends to plug a well, or to re-enter and clean out a previously plugged well for the purpose of replugging the well, is subject to the:

(1) notice and plan requirements of sections 6 through 8;

(2) requirements of sections 9 through 21;

(3) requirement to file well plugging reports under section 22; and

(4) requirements for well site cleanup and restoration under subsection 23(b) of this rule.

312 IAC 29-33-3 Deferring the plugging and abandoning of a well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) An owner or operator may defer the plugging and abandoning of a well as required under section 1 for a well that has been drilled, completed, and cased for production, if:

(1) the well is otherwise in compliance with IC 14-37 and this article; and,

(2) the owner or operator satisfies the requirements of this section.

(b) The owner or operator shall specify the date by which the well is intended to be plugged, which shall not be more than one (1) year from the date of providing notice under Section 3.

(c) For any well that a notice of intent to defer plugging and abandonment is provided, the owner or operator shall:

(1) Equip the well with an intact, leak-free wellhead or cap the well with a valve configured to monitor casing or casing-tubing annulus pressure.

(2) If requested by the division director, demonstrate that the well does not threaten an underground source of drinking water by;

(A) monitoring wellhead pressures and fluid levels in the well, or

(B) performing a mechanical integrity test on the casing.

312 IAC 29-33-4 Temporary abandonment of wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) An owner or operator of a well may temporarily abandon a well if the well otherwise meets the requirements of IC 14-37 and this article and the well conforms to the requirements of this section. To temporarily abandon a well, the owner or operator must file an application for temporary abandonment on a form prescribed by the division within sixty (60) days after any of the following:

(1) The date on which the drilling and casing of the well is completed.

(2) The date on which the operation of the well is terminated.

(3) The expiration of the period during which the owner or operator defers abandoning the well under section 3.

(b) The application for temporary abandonment shall include sufficient information to demonstrate that the engineering, geologic, or economic reasons for retaining the well on temporary abandonment status outweigh the potential benefit of either

(1) operating the well; or

(2) plugging the well.

(c) The owner or operator shall ensure that the well has mechanical integrity or does not otherwise threaten an underground source of drinking water by:

(1) Installing tubing and packer or a mechanical bridge plug, cement, or other suitable plug placed within two hundred feet (200') above the perforated or open hole interval in the cemented portion of the casing, but no less than one hundred feet (100') below the base of the lowermost underground source of drinking water and either:

(A) Remove any fluid in the well to a level at least one hundred feet (100') below the base of the lowest underground source of drinking water; or

(B) Pressure test the casing above the packer or plug at least once every five (5) years at a pressure of at least three hundred (300) pounds per square inch gauge for a period of thirty (30) minutes with the pressure varying no more than three percent (3%) during the test period.

(2) Monitoring the fluid level in the well using acoustical or wire line measuring methods on an annual basis. Using this method requires the owner or operator to also comply with the following:

(A) Report the results of monitoring annually on a form prescribed by the division.

(B) If the fluid level is closer than one hundred feet (100') to the base of the lowest underground source of drinking water, the owner or operator shall notify an inspector within twenty-four (24) hours and either;

(i) verify at least one (1) time every two (2) years by analysis of a sample of the fluid in the well that the fluid is water that does not pose a threat to an underground source of drinking water, or

(ii) use one of the other methods in this subsection to demonstrate mechanical integrity of the well.

(3) Notwithstanding subsections (c)(1) and (c)(2) mechanical integrity for a gas well with a minimum wellhead pressure of one-hundred pounds per square inch (100 psi) may be established according to the following:

(i) At least ten percent (10%) of the initial shut-in pressure shall be bled off, and the well shall be shut back in under the supervision of the inspector.

(ii) Once the well returns to the maximum shut-in pressure, the pressure must be maintained at a constant level for thirty (30) minutes in the presence of an inspector.

(iii) A pressure measuring device displaying a readout of the shut-in pressure shall be attached to the wellhead and shall be accessible at all times for inspection by the inspector.

(d) Temporary abandonment of a well under this section may be granted for a period not to exceed five (5) consecutive years.

(e) Upon the expiration of temporary abandonment status, the owner or operator shall do one (1) of the following:
(1) Operate the well for its permitted purpose.
(2) Plug and abandon the well in accordance with IC 14-37 and this rule.
(3) Submit a request for temporary abandonment renewal according to the requirements of subsections (b) and (c) of this section.

(f) In considering whether to extend the period of temporary abandonment beyond the initial five (5) year period, the division director may require the owner or operator to submit additional information to justify the need for continued temporary abandonment and to ensure protection of the environment and validate the likelihood that a well will be returned to active status or properly plugged and abandoned as required under this article. Such additional information may include, but is not limited to, the following:
(1) A list of all improvements or workovers that will be required to equip the well for active status.
(2) A description of other improvements or infrastructure that will be needed to return the well to active status.
(3) An itemized list of the costs associated with each of the improvements or workovers identified in (A) and (B) above.
(4) A detailed time schedule for completing all of the workovers or improvements identified by the owner or operator.
(5) An estimate of the cost to plug and abandon the well by an independent plugging contractor.

(g) An owner or operator must notify the division in writing within thirty (30) days of any change in the operational status of a well that has been granted temporary abandonment status under this section.

(h) Operation of a well that is subject to this section removes the well from temporary abandonment status.

(i) The authorization to inject granted under 312 IAC 29-27-1 is withdrawn upon the division's grant of temporary abandonment status for any Class II well. Injection operations shall not recommence unless the requirements of 312 IAC 29-27-1(b) are met and the division has issued a new authorization to inject.

312 IAC 29-33-5 Specifications for cement used in the plugging of wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) Cement used in the plugging of wells under this Rule shall:

(1) be Class A, C, or H, as described in the "Specification for Cements and Materials for Well Cementing" referenced in subsection (b)(1) of "Specification for Cements and Materials for Well Cementing", American Petroleum Institute, API Specification 10A, Twenty-Fourth Edition (December 2010); and

(2) comply with "Standard Specification for Portland Cement", ASTM International, ASTM Standard C150/150M-11 (May 2011)

(b) The properties and types of cement used, including cement additives, shall be determined in accordance with commonly recognized industry standards and shall provide for the following:

(1) A minimum weight of thirteen (13) pounds per gallon, unless the cement contains additives that improve the ability of the cement to provide necessary protection and that maintains a minimum compressive strength of five hundred pounds per square inch (500 psi) after seventy-two (72) hours.

(2) Isolating the wellbore from underground sources of drinking water.

(3) Preventing the significant loss of cement into voids or lost-circulation zones.

(4) Preventing gas flow or movement of any fluids in the annulus or through cemented portions of a plugged well.

(5) Protecting commercially minable coal resources as required under 312 IAC 29-16.

312 IAC 29-33-6 Written notice of intent to plug a well and well plugging plan
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. (a) Except as provided in sections 9 and 10, the owner and operator shall give written notice to the division of intent to plug an existing well at least fifteen (15) days before commencing the plugging of the well.

(b) The written notice required by subsection (a) shall be on a form prescribed by the division.

(c) Unless a well plugging plan has been previously submitted to the division for approval, the notice required under subsection (b) must include a plan for plugging the well that:

(1) describes the specific methods that would be used;

(2) specifies the date on which plugging operations are scheduled to commence, if known; and

(3) indicates compliance with this rule, including the location of each cement plug to be placed in the well.

312 IAC 29-33-7 Notification to underground gas storage operator
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 7. At least ten (10) days before commencing the plugging of any well located within one-half (½) mile of an underground gas storage facility boundary, the owner or operator shall give written notice of intent to plug the well to the underground gas storage facility operator the well. The notice shall:

(1) Include a copy of the well plugging plan;

(2) Indicate the date on which plugging is planned to commence; and

(3) Provide the opportunity for the underground storage operator to have a representative present to witness the well plugging operations.

312 IAC 29-33-8 Notification to oil and gas inspector
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 8. (a) Unless an emergency or an urgent condition exists under section 9, in addition to the written notice and plan required under section 7 an owner or operator must provide notice to the oil and gas inspector assigned to the well of the date and time on which well plugging operations are scheduled to commence. The notice shall consist of at least one (1) of the following:

(1) Written notice delivered in person to the inspector.

(2) An e-mail message sent to the inspector, with a read-receipt request verifying the date and time the inspector read the message.

(3) Verbal communication provided in person or by telephone to the inspector.

(4) A voice mail message left on the telephone of the inspector and either:

(A) verbal communication in person or by telephone with the assistant director of field inspections; or

(B) voice mail message left on the telephone of the assistant director of field inspections.

(b) Unless a shorter time for notification is agreed between the oil and gas inspector and the owner or operator, the owner or operator must give the notification required in subsection (a) at least:

(1) twelve (12) hours before the time to commence plugging operations when a well is to be plugged as a dry hole immediately following conclusion of drilling or drilling operations; or
(2) forty-eight (48) hours before the time scheduled to commence plugging operations for a well not described in subdivision (1).

(c) An owner or operator must not commence plugging operations without an oil and gas inspector present, unless the owner or operator has:
(1) complied with the notice requirements of this section; and
(2) obtained division approval for a plugging plan.

312 IAC 29-33-9 Procedures for plugging well when emergency or urgent condition exists
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 9. (a) Notwithstanding sections 6 through 8, if an emergency or an urgent condition exists that requires immediate plugging of a well, an owner or operator may commence well plugging operations upon oral communication of the plan for plugging the well and receipt of oral approval from, at least one (1) of the following:
(1) The division director;
(2) The assistant director of field inspections; or
(3) The assistant director of underground injection and technical services.

(b) For purposes of this Section, an emergency condition exists if:
(1) A well is leaking or discharging oil, gas, or other fluids in quantities that are capable of:
(A) causing substantial harm to the environment; or
(B) posing an immediate threat to public health or safety.

(c) For purposes of this section, an urgent condition exists if delay in plugging a well is likely to result in a substantial increase in the cost to plug the well due to impending weather or other conditions that are beyond the control of the owner or operator.

312 IAC 29-33-10 Order to redrill and replug a well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 10. The division director may require an owner or operator to redrill and replug a well if the owner or operator does not comply with the requirements of Sections 5 through 9.

312 IAC 29-33-11 Management and storage of plugging wastes and plugging pits
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 11. (a) The discharge of fluids from any activity associated with plugging operations to any surface or ground waters or in a location where it is likely to cause pollution to any surface or groundwater is prohibited.

(b) When plugging a well, the owner or operator must provide at least one (1) plugging pit or leak-free, portable aboveground tank into which plugging fluid wastes are deposited.

(c) Where excavated plugging pits are used, they shall be constructed and maintained to provide a minimum of two (2) feet of freeboard at all times.

(d) All excavated plugging pits shall be constructed with a liner using one of the following methods:
(1) Use of a synthetic liner meeting the requirements of 312 IAC 29-21-2(b).
(2) A compacted clay liner may be applied to the bottom and sides of the pit to create an impervious barrier. Construction of the compacted clay liner shall be in accordance with accepted construction and design principles designed to prevent any leakage or seepage from the pit. The clay used to construct the liner may be in situ or mixed with additional off-site materials, if the on-site clay is inadequate.

(3) Other materials or methods used for liner construction may be used if authorized by the division director after a demonstration is made by the owner or operator that such materials or methods will provide equivalent protection and prevent leakage or seepage of fluids from the pit.

(e) Prior to excavating a plugging pit on tillable land, the owner or operator shall consult with the surface owner to determine the location of any subsurface drainage tiles that may be present in the area of excavation. Excavation operations shall be conducted in a manner to avoid damage to subsurface drainage systems where practical. The owner or operator is responsible to repair or replace any subsurface drainage tiles that are damaged during pit construction or backfilling operations.

(f) Plugging pits shall be used only for the temporary storage of plugging fluid wastes as provided in this rule and shall not be used for the disposal of other wastes that are not directly resulting from plugging operations.

312 IAC 29-33-12 Plugging fluid disposal and pit closure requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 12. (a) Within thirty (30) days of the conclusion of well plugging operations, all fluids and materials in the plugging pit shall be managed according to the requirements of this section and the pits backfilled and restored as specified in subsection (d).

(b) The plugging pit contents shall be removed to the maximum extent practical and, if not reused or recycled at another well location, the wastes shall be disposed of in one or more of the following manners:
(1) Transported to a permitted landfill authorized to accept this type of waste.
(2) Treatment and discharge of the fluid at an approved national pollutant discharge elimination system (NPDES) permitted facility.
(3) Disposal of the fluid by injection into a Class II well.
(4) Treated or disposed of by other means approved by the division director after consultation with the Indiana department of environmental management.

(c) Any synthetic liner used shall be removed to the fullest extent practicable and properly disposed or recycled.

(d) The closed plugging pit shall be filled with native materials sufficient to ensure that the site is stable and will allow for settling with the final contour restored as close as possible to the original land contour.

312 IAC 29-33-13 Prohibition of unauthorized materials in a well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 13. (a) This section prohibits the placement or use of any foreign materials not expressly authorized under this article to plug a well.

(b) Except for an unavoidable loss of drilling and logging tools, production equipment, or damaged casing obstructing a well bore, an owner or operator shall not place or allow any unauthorized material in an unplugged well to fill or bridge the hole. Before plugging operations commence, any unauthorized material shall be removed.

312 IAC 29-33-14 Plugging of a bridged well
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 14. (a) If drilling or logging tools, production equipment, damaged casing, or other obstructive material are encountered and removal of the obstruction is impracticable, the division director or an authorized representative may modify the plugging requirements of this document by specifying alternative plugging requirements.

(b) In determining whether to approve alternative plugging requirements, the division shall consider the following:
(1) The time and cost of removing lost tools or equipment.

(2) The depth of the lost tools or equipment in relation to the depth of underground sources of drinking water.
(3) The condition of the well, including well construction and whether caving or other conditions may pose a substantial risk to further loss of tools or equipment.
(4) The potential for upward migration of well bore fluids into an underground source of drinking water.

312 IAC 29-33-15 Placement of cement behind uncemented casings
Authority: IC 14-37-3
Affected: IC 14-37

Sec. 15. (a) This section establishes requirements for ensuring the placement of cement behind uncemented casing strings when plugging any well.

(b) If cement is not present outside a casing at each cement plug required in this rule, an owner or operator must remove, perforate, part, or rip the casing at fifty (50) foot intervals to ensure adequate cement is placed in the annular space behind the casing. The division may require an owner or operator to run a cement bond-variable density log if sufficient information is not otherwise available to determine the location of the cement outside the casing.

312 IAC 29-33-16 Dry hole bottom plugs
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 16. (a) This section establishes requirements for setting a bottom plug in a dry hole or another well in which production casing is not set and cemented.

(b) An owner or operator shall plug any well in which production casing is not set and cemented immediately after drilling ceases.

(c) The well shall be filled with drill cuttings or mud extending from the bottom of the well to at least fifty (50) feet below the deeper of:
(1) a commercially minable coal resource identified under 312 IAC 29-16; or
(2) the base of the lowermost underground source of drinking water.

312 IAC 29-33-17 Cased hole bottom plugs other than horizontal coal bed methane wells
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 17. (a) This section establishes requirements for setting a bottom plug in a cased well other than a horizontal coal bed methane well.

(b) If an owner or operator uses the circulation method, and except as provided in subsection (d), a cement plug must be placed across each completed interval and across each exposed interval into which injection is occurring within a one-quarter (1/4) mile radius of the well. The bottom cement plug shall be set beginning from the shallower of:
(1) fifty (50) feet below the deepest completed interval; or
(2) total depth or plugged back total depth.
The plug shall extend at least two hundred fifty (250) feet above the uppermost completed interval.

(c) If an owner or operator uses the dump bailer method, and except as provided in subsection (d), a cast iron bridge plug must be set inside the cemented portion of the casing immediately above either:
(1) each completed interval with a minimum of ten (10) feet of cement placed on top of each cast iron bridge plug; or
(2) the lowermost completed interval and the well bore casing filled with cement to fifty (50) feet above the top of the uppermost completed interval, with the production casing or wellbore annulus filled with cement to fifty (50) feet above the uppermost completed interval.

(d) Instead of setting a bottom plug under subsection (c) or (d), an owner or operator may:
(1) If using the circulation method, place cement from total depth to three (3) feet below ground elevation.

(2) For any well with two (2) or fewer completed zones and circulated casing, except a well flowing gas or fluid to the surface, use surface pumping or bullhead pumping of cement from the uppermost perforated zone to three (3) feet below the surface.
(3) For a horizontal well, instead of setting the cement bottom plug from total depth or plugged back total depth, either of the following methods may be used:
(A) The wellbore shall be filled with mud up to the kick-off point, and a cement plug of not less than two hundred fifty (250) feet shall be placed above that point.
(B) A cast iron bridge plug shall be set inside the cemented production casing below the kick-off point as low in the well as the curve will allow, and a cement plug of not less than two hundred fifty (250) feet shall be placed on top of the bridge plug.

(e) Regardless of the method used for placing cement, an owner or operator must place a cast iron bridge plug at the locations identified in subsections (c)(1) and (2) in any well that is flowing gas or fluid to the surface.

312 IAC 29-33-18 Horizontal coal bed methane well bottom plugs
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 18. (a) This section establishes requirements for the setting of bottom plugs in horizontal coal bed methane wells.

(b) Unless prior written consent is received under IC 14-37-4-8.5(f) and IC 14-37-4-8.5(g), an owner or operator must plug the horizontal drain hole portions of a coal bed methane well using the type and amounts of plugging materials specified in the plan previously approved under section 5.

(c) The use of materials to plug horizontal drain hole portions of a coal bed methane well of a different type or the use of different amounts than specified in the plan previously approved under section 6, may be used only if written consent is given by the coal owner and the director finds that such types or amounts of plugging materials are not likely to result in waste of the commercially minable coal resource or adversely affect the health and safety of underground miners.

(d) This section does not require an operator to plug the horizontal drain hole portion of a coal bed methane well, if the coal owner has given written consent to the drilling of the well under IC 14-37-4-8.5(f) and IC 14-37-4-8.5(g).

(e) Upon conclusion of the plugging of horizontal drain hole portions of a coal bed methane well, the owner or operator must either:
(1) place a cement bottom plug beginning from the plugged back total depth and extending for a minimum distance of two hundred fifty (250) feet above that point; or
(2) use mud to fill the well bore from plugged back total depth up to the kick-off point and place the cement bottom plug at the beginning of the well curve kick-off point and extend the plug for a minimum distance of two hundred fifty (250) feet above that point.

312 IAC 29-33-19 Approved materials for filling intervals between plugs
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 19. (a) This section establishes requirements for filling intervals between plugs required under this rule.

(b) Unless specified otherwise, the uncemented intervals between any plugs required under this rule may be filled with:
(1) pea gravel;
(2) crushed rock;
(3) mud or bentonite gel; or
(4) water.

312 IAC 29-33-20 Plugging requirements to protect commercially minable coal resource
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 20. (a) This section establishes requirements for plugging a well for oil and gas purposes to protect a coal seam identified as a commercially minable coal resource.

(b) Before preparing the notice and plan for well plugging under section 6, the owner or operator must determine if a well is located within an area considered a commercially minable coal resource under 312 IAC 29-16-1 and 312 IAC 29-16-2.

(c) If a well to be plugged is located within an area considered a commercially minable coal resource, the owner or operator must submit a copy of the proposed well plugging plan to the coal owner, lessee, or other person with the right to develop the commercially minable coal resource by underground mining methods. Proof of notification may be demonstrated by one (1) or more of the following:

(1) A receipt from certified mail or other courier which provides proof of delivery.

(2) A signed and dated written statement from each party entitled to notice that identifies the well to be plugged and acknowledges receipt of a plugging plan.

(3) Copies of the plugging plan containing a dated signature from each party entitled to notice, acknowledging receipt of the plan.

(d) A person with a coal interest shall be given at least fifteen (15) days to:

(1) review the plan;

(2) recommend any suggested revisions to the owner or operator which the person with the coal interest believes are necessary to provide increased protection of the commercially minable coal resource as provided under subsection (e); and

(3) determine whether the person with a coal interest will pay for any additional costs which might result from the use of the additional protective measures reference in subdivision (2).

(e) If a person with a coal interest determines additional coal seam protection measures are needed to meet the requirements of the U.S. Mine Safety and Health Administration, and the person intends to seek U.S. Mine Safety and Health Administration approval to conduct underground coal mining operations in close proximity to the affected oil and gas well, the person may request the owner or operator to do either or both of the following:

(1) Set the cement plug required under this section beginning at a point deeper than fifty (50) feet below each coal seam.

(2) Include commonly used additives that result in expansion of the cement mixture as it cures.

(f) An owner or operator must prepare a well plugging plan that includes the additional coal seam protection measures requested under subsection (e) if:

(1) the additional protection measures are consistent with commonly accepted practices for coal seam protection for similar wells plugged in the Illinois basin; and

(2) the person with a coal interest agrees to pay for any additional costs that might result from the use of the additional coal seam protection measures.

(g) An owner or operator shall only be responsible for setting the coal seam plug under the requirements of subsection (f) if the person with a coal interest:

(1) does not respond within the fifteen (15) day period described in subsection (c); or

(2) provides written notification that no special plugging requirements are necessary.

(h) Except as provided under subsections (c) through (f), an owner or operator must set a cement plug beginning from a depth of at least fifty (50) feet below each coal seam considered a commercially minable coal resource and extending to a depth of three (3) feet below ground elevation. If the top of the uppermost commercially minable coal resources is greater than two hundred (200) feet below the base of the lowermost source of underground drinking water, the top of the cement may extend to a depth of one hundred (100) feet above the uppermost commercially minable coal resource.

(i) The requirements of this section do not apply to the plugging of a coal bed methane well if the consent of the coal owner or coal lessee is granted under IC 14-37-4-8.5(d)(2).

312 IAC 29-33-21 Top plug requirements
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 21. (a) This section establishes requirements for setting a top plug in a well.

(b) An owner or operator must set a top plug beginning from a depth of at least fifty (50) feet below the lowermost underground source of drinking water and extending to a depth of three (3) feet below ground elevation.

(c) Within seventy-two (72) hours after setting a top plug under subsection (b), an owner or operator must confirm the level of the top of the cement inside the casing and outside the casing. If the cement top cannot be confirmed visually, the operator shall measure the depth to the top of the cement using a wireline or other suitable distance measuring method. The owner or operator must fill the casing and well annulus to within three (3) feet of the ground elevation with cement or other plugging material as provided in subsection (d).

(d) When the cement top has fallen no more than one hundred feet (100') below ground elevation, the well may be filled with bentonite or cement poured from the surface into the well and the well annulus. However, if there is a column of water greater than ten feet (10') on top of the cement, cement must be placed using the circulation method.

(e) The use of bentonite chips under subsection (d) shall comply with the following:
(1) The bentonite shall be of a grade commercially marketed for use in sealing or plugging earthen boreholes.
(2) Unless authorized by the division, the bentonite shall have a typical particle size of not less than three-eighths inches (3/8"). Unless the bentonite chips are compressed or specially coated to retard the rate of hydration when poured through standing water, the chips shall be screened prior to placement in the well to remove fine particles.
(3) When using bentonite chips to fill the annulus, the chips shall be poured directly into the annular space from the top of the well provided the hole diameter outside the annular space to be filled is at least one and one-half inches (1½") greater than the outside diameter of the casing.
(4) The total volume of bentonite chips used shall be calculated to completely fill the intended top plug interval when fully hydrated. Sufficient water shall be placed into the well to ensure full hydration of the bentonite.
(5) Bentonite chips shall not be used in water containing an excess of 12,000 mg/L of total chlorides.
(6) Bentonite chips shall be poured into the well at a rate which prevents bridging in the well. It is recommended the chips be poured at a rate of 2 to 3 minutes per 50 pound bag.

(f) To facilitate identifying the location of the plugged well in the future, if no surface casing or production casing remains in a well, the owner or operator must place a steel plate at least one-quarter (1/4) inch thick and not less than eight (8) inches in diameter at the top of the cemented well bore. The steel plate shall be encased or incorporated in the cement within one (1) foot of the top of the cement and approximately three (3) feet below ground elevation.

312 IAC 29-33-22 Use of plugging materials other than cement
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 22. The division director may approve the use of plugging materials other than cement or bentonite chips as provided in section 20 if an owner or operator demonstrates the material:
(1) provides equal or greater protection to commercially minable coal resources and underground sources of drinking water; and,
(2) Prevents movement of any oil, gas, coal bed methane, and other fluids from the original formations.

312 IAC 29-33-23 Filing of well plugging reports
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 23. (a) Within thirty (30) days after finishing well plugging operations under this rule, the owner or operator shall complete and file a plugging report with the division on a form provided by the division. The report shall:
(1) describe in detail the specific methods used to plug the well including the types and amounts of cement or, if used, bentonite as provided in section 20 or other materials as provided in section 21;
(2) be signed by the well owner or operator and the person who performed the well plugging operations; and
(3) include an affidavit certifying that the well was plugged under IC 14-37-8 and the requirements of this rule.

(b) Accompanying the plugging report required by subsection (a), the owner or operator shall provide copies of the following:

(1) Cement tickets documenting the type and amount of cement used.

(2) Job tickets for all wireline services used during the well plugging operations.

(3) Cement bond-variable density logs, if run, during the plugging operations.

312 IAC 29-33-24 Final well site abandonment and reclamation
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 24. (a) Within six (6) months after a well is plugged, the owner or operator shall do the following:

(1) Cut off and remove all casing from three (3) feet below ground elevation to the surface.

(2) Close workover tanks or plugging pits and handle the content in accordance with the requirements of 312 IAC 29-21-3(b) through (d).

(3) Except as otherwise provided in this subdivision, remove drilling and production equipment, rock or concrete bases, substructures, machinery, above ground flowlines, and equipment debris associated with the well. Rock or concrete bases may be buried on-site, if buried at least three (3) feet below ground surface. A landowner may assume responsibility for any equipment or structures, if the landowner submits a written release to the division on a division form that identifies any equipment or structure for which a landowner is assuming responsibility.

(4) Restore the well site as nearly as practicable to its condition before drilling.

(b) Within six (6) months after the last well on a lease is plugged, an owner or operator must do the following:

(1) Backfill and regrade all excavations.

(2) Clean, backfill, and regrade any pits and concrete storage structures used to store produced fluids as required under this article.

(3) Clean and remove all tanks, separators, and other aboveground storage vessels.

(4) Clean and remove all aboveground flow lines.

(5) Demolish or remove all buildings, electric power lines and poles, pump houses, or other structures used in a production operation unless written authorization is obtained from the surface owner to leave a facility in place. The written authorization shall be submitted to the division on a division form that identifies any equipment and structure for which a landowner is assuming responsibility.

(6) Remove all containment dikes and backfill and regrade the tank battery facility location.

(7) Remove and properly dispose of any remaining production equipment, pipes and fittings, concrete pads, equipment debris, contaminated soil, and general oilfield waste.

Rule 34. Inspections and enforcement

312 IAC 29-34-1 Inspection of wells and production facilities
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 1. The division director or an authorized representative may at any reasonable time enter upon public or private property where a well for oil and gas purposes is being drilled or has been drilled for the purpose of inspection to ascertain compliance with IC 14-37 and this article.

312 IAC 29-34-2 Warning of non-compliance
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 2. (a) The division director or an authorized representative may issue a written warning of non-compliance under this Section in lieu of a notice of violation. Nothing contained in this section precludes the immediate or subsequent issuance of a notice of violation.

(b) A written warning of non-compliance may be considered by the division director where the observed violation does not involve damage to property or pose an immediate threat to the environment or to public health or safety.

(c) A written warning of non-compliance is not subject to administrative review under IC 4-21.5.

(d) A written warning of non-compliance must include the following information:
(1) The nature of the non-compliance.
(2) The action appropriate to abate the non-compliance.
(3) The date by which the non-compliance must be abated.

(e) A written warning of non-compliance shall not be considered for the following purposes:
(1) when determining whether a person has an outstanding violation for purposes of permit denial under 312 IAC 29-4-6;
(2) in establishing a pattern of willful violations for purposes of permit revocation under section 6; or
(3) in establishing a history of violations for purposes of civil penalty assessment under section 5.

312 IAC 29-34-3 Notice of violation
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 3. (a) The division director or an authorized representative may issue of notice of violation against any person who violations IC 14-37 or this article.

(b) A written notice of violation shall include the following information:
(1) The nature of the violation.
(2) The action necessary to abate the violation.
(3) The date by which the violation must be abated.
(4) Notice that a person may file a written request for administrative review of the notice of violation within thirty (30) days of issuance at the following address:

Natural Resources Commission
Division of Hearings
Indiana Government Center North, Room N501
100 North Senate Avenue
Indianapolis, Indiana 46204

(c) A written notice of violation shall be considered properly served upon:
(1) personal delivery upon the owner or operator; or
(2) service by United States First Class mail to the address of record on file with the division.

(d) The date established for abating the violation under subdivision (a)(3) may be extended by the division director or an authorized representative upon a request from the owner or operator demonstrating that:
(1) abatement within the original time established is not practicable due to:
(A) the scope of actions required for abatement; or,
(B) circumstances beyond the control of the owner or operator, and
(2) a delay in abating the violation will not
(A) substantially increase the damage to property;
(B) increase the threat to the environment; or,
(C) increase the threat to public health or safety.

(e) A notice of violation issued under this section becomes effective without a proceeding under IC 4-21.5 unless a person requests administrative review under IC 4-21.5-3-6 within thirty (30) days of issuance.

312 IAC 29-34-4 Civil penalties
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 4. (a) The division director or authorized representative may assess a civil penalty for a violation of IC 14-37 or this article after considering the following factors:

(1) the seriousness of the violation including whether the violation:
(A) resulted in or had the potential to damage to property;
(B) adversely affected or had the potential to adversely affect the environment; or,
(C) threatened or caused harm to public health or safety;
(2) the extent to which the violation appears to have been caused:
(A) willfully;
(B) through negligence; or,
(C) through a failure to exercise reasonable care to prevent the occurrence of the violation;
(3) the owner's or operator's history of violations, including violations at other locations and under other permits; and
(4) the extent to which factors beyond the control of the owner or operator may have caused or contributed to the violation.

(b) A notice of civil penalty assessment shall be served as prescribed in 312 IAC 29-33-3(c) and include the following information:
(1) An explanation for issuance of the civil penalty assessment;
(2) The amount of the civil penalty assessed; and
(3) Notice that a person may file a written request for administrative review of the civil penalty assessment within thirty (30) days of issuance at the following address:

Natural Resources Commission
Division of Hearings
Indiana Government Center North, Room N501
100 North Senate Avenue
Indianapolis, Indiana 46204

(c) A civil penalty assessment becomes effective and immediately payable unless a person requests administrative review under IC 4-21.5 within thirty (30) days of issuance.

312 IAC 29-34-5 Permit revocation procedure
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 5. (a) The division director may initiate a proceeding under IC 4-21.5 and IC 14-37 to revoke a permit for a well for oil and gas purposes upon a finding that the:
(1) permit was issued through fraud or misrepresentation;
(2) information or conditions upon which a permit was issued have substantially changed since issuance;
(3) owner or operator has failed to maintain bond on a permit as specified in 312 IAC 29-11-6;
(4) owner or operator has violated IC 14-37 or this article;
(5) owner or operator of a well for oil and gas purposes is polluting the waters or land in Indiana; or
(6) owner or operator has been issued a notice of violation under 312 IAC 29-33-3 and has failed to do at least one (1) of the following:
(A) Abate the violation within the prescribed period.
(B) Secure in writing an extension of time in which to abate the violation before the expiration of the period established for abatement.
(C) Request a proceeding under IC 4-21.5-3-6 within:
(i) thirty (30) days after receipt of the notice of violation; or
(ii) the period provided by the division for abatement;
whichever is longer.

(b) In addition to the grounds for permit revocation set forth under subsection (a), a permit for a Class II well may be revoked, modified, or reissued under IC 4-21.5-3-5 where there is:
(1) a substantial change of conditions in the operation of the Class II well
(2) a substantial change in the information upon which the permit was issued; or
(3) reasonable cause to believe that the permitted operation may result in the movement of fluids into an underground source of drinking water other than an exempted aquifer.

312 IAC 29-34-6 Repermitting a well for oil and gas purposed following revocation
Authority: IC 14-10-2-4; IC 14-37-3
Affected: IC 14-37

Sec. 6. A person, other than the person whose permit was revoked, may obtain a permit for a well revoked under IC 14-37 and section 5 if the person assumes full responsibility for:
(1) abatement of the violation; and
(2) operation, maintenance, and plugging of the well.

SECTION 2. THE FOLLOWING IS REPEALED: 312 IAC 16.